Symphonic SYLVANIA

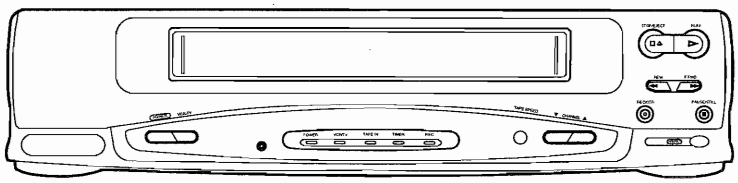
Emerson®

SERVICE MANUAL

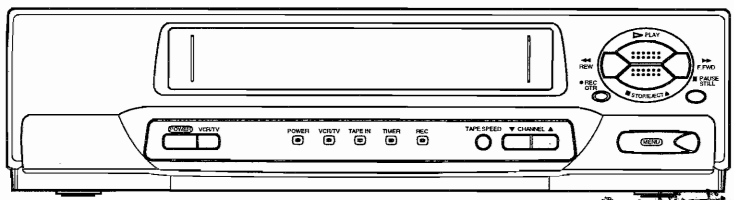
Sec. 1: Main Section	Sec. 2: Deck Mechanism Section	Sec. 3: Exploded views and Parts List Section
● Specifications ● Preparation for Servicing ● Adjustment Procedures ● Schematic Diagrams ● CBA' s	● Standard Maintenance ● Alignment for Mechanism ● Disassembly/Assembly of Mechanism ● Alignment Procedures of Mechanism	● Exploded views ● Parts List

VIDEO CASSETTE RECORDER

SL260B



6260VB/EWV601



VHS

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IMPORTANT SAFETY NOTICE

Proper service and repair is important to the safe, reliable operation of all Funai Equipment. The service procedures recommended by Funai and described in this service manual are effective methods of performing service operations. Some of these service special tools should be used when and as recommended.

It is important to note that this service manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It also is important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. Funai could not possibly know, evaluate and advice the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, Funai has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by Funai must first use all precautions thoroughly so that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

MAIN SECTION

VIDEO CASSETTE RECORDER

SL260B/6260VB/EWV601

Sec. 1: Main Section

- **Specifications**
- **Preparation for Servicing**
- **Adjustment Procedures**
- **Schematic Diagrams**
- **CBA' s**

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SPECIFICATIONS

Description	Unit	Minimum	Nominal	Maximum	Remark
1. Video					
1-1. Video Output (PB)	Vp-p	0.8	1.0	1.2	FL6A
1-2. Video Output (R/P)	Vp-p	0.8	1.0	1.2	
1-3. Video S/N Y (R/P)	dB	40	45		SP Mode, W/O Burst
1-4. Video Color S/N AM (R/P)	dB	37	41		SP Mode
1-5. Video Color S/N PM (R/P)	dB	30	36		SP Mode
1-6. Resolution (PB)	Line	230	245		SP Mode
2. Servo					
2-1. Jitter Low	μsec		0.07	0.12	SP Mode
2-2. Wow & Flutter	%		0.3	0.5	SP Mode
3. Normal Audio					
3-1. Output (PB)	dBV	-9	-6	-3	SP Mode
3-2. Output (R/P)	dBV	-9	-6	-1.5	SP Mode
3-3. S/N (R/P)	dB	36	41		SP Mode
3-4. Distortion (R/P)	%		1.0	4.0	SP Mode
3-5. Freq. resp (R/P) at 200Hz	dB	-11	-4		SP Mode
(-20dB ref. 1kHz) at 8kHz	dB	-14	-4		SP Mode
4. Tuner					
4-1. Video output	Vp-p	0.8	1.0	1.2	E-E Mode
4-2. Video S/N	dB	39	42		E-E Mode
4-3. Audio output	dB	-10	-6	-2	E-E Mode
4-4. Audio S/N	dB	40	46		E-E Mode
5. Hi-Fi Audio					
5-1. Output	dBV	-12	-8	-4	SP Mode
5-2. Dynamic Range	dB	70	85		SP Mode
5-3. Freq. resp (6dB B.W)	Hz		20 ~ 20K		SP Mode

Note: Nominal specs represent the design specs. All units should be able to approximate these – some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition that still might be considered acceptable; In no case should a unit fail to meet limit specs.

IMPORTANT SAFETY PRECAUTIONS

Product Safety Notice

Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by a ⚠ on schematics and in parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire, and/or other hazards. The Product's Safety is under review continuously and new instructions are issued whenever appropriate. Prior to shipment from the factory, our products are carefully inspected to confirm with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

Precautions during Servicing

A. Parts identified by the ⚠ symbol are critical for safety. Replace only with part number specified.

B. In addition to safety, other parts and assemblies are specified for conformance with regulations applying to spurious radiation. These must also be replaced only with specified replacements.

Examples: RF converters, RF cables, noise blocking capacitors, and noise blocking filters, etc.

C. Use specified internal wiring. Note especially:

1) Wires covered with PVC tubing
2) Double insulated wires
3) High voltage leads

D. Use specified insulating materials for hazardous live parts. Note especially:

1) Insulation tape
2) PVC tubing
3) Spacers
4) Insulators for transistors

E. When replacing AC primary side components (transformers, power cord, etc.), wrap ends of wires securely about the terminals before soldering.

F. Observe that the wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).

G. Check that replaced wires do not contact sharp edges or pointed parts.

H. When a power cord has been replaced, check that 5 - 6 kg of force in any direction will not loosen it.

I. Also check areas surrounding repaired locations.

J. Use care that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

K. Crimp type wire connector

The power transformer uses crimp type connectors which connect the power cord and the primary side of the transformer. When replacing the transformer, follow these steps carefully and precisely to prevent shock hazards.

Replacement procedure

1) Remove the old connector by cutting the wires at a point close to the connector.

Important: Do not re-use a connector. (Discard it.)

2) Strip about 15 mm of the insulation from the ends of the wires. If the wires are stranded, twist the strands to avoid frayed conductors.

3) Align the lengths of the wires to be connected. Insert the wires fully into the connector.

4) Use a crimping tool to crimp the metal sleeve at its center. Be sure to crimp fully to the complete closure of the tool.

L. When connecting or disconnecting the internal connectors, first, disconnect the AC plug from the AC outlet.

Safety Check after Servicing

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts, and wires have been returned to their original positions. Afterwards, do the following tests and confirm the specified values to verify compliance with safety standards.

1. Clearance Distance

When replacing primary circuit components, confirm specified clearance distance (d) and (d') between soldered terminals, and between terminals and surrounding metallic parts. (See Fig. 1)

Table 1 : Ratings for selected area

AC Line Voltage	Clearance Distance (d) (d')
120 V	≥ 3.2 mm (0.126 inches)

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

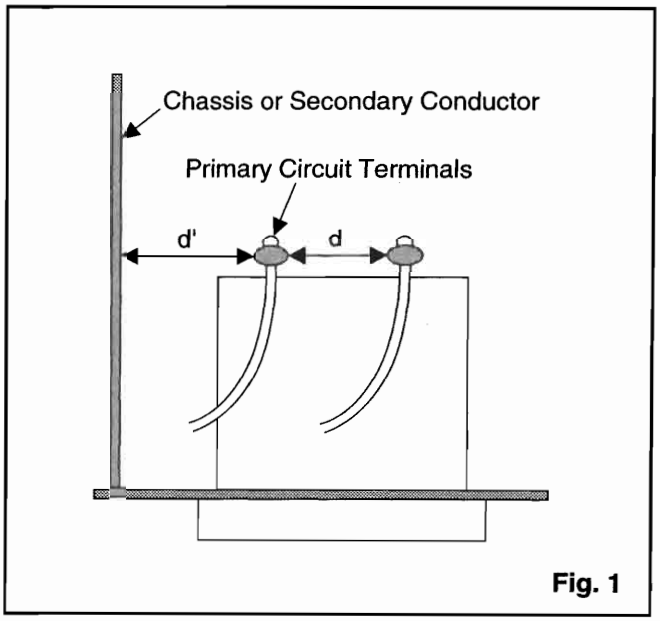


Fig. 1

2. Leakage Current Test

Confirm the specified (or lower) leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.) is lower than or equal to the specified value in the table below.

Measuring Method (Power ON) :

Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across the terminals of load Z. See Fig. 2 and the following table.

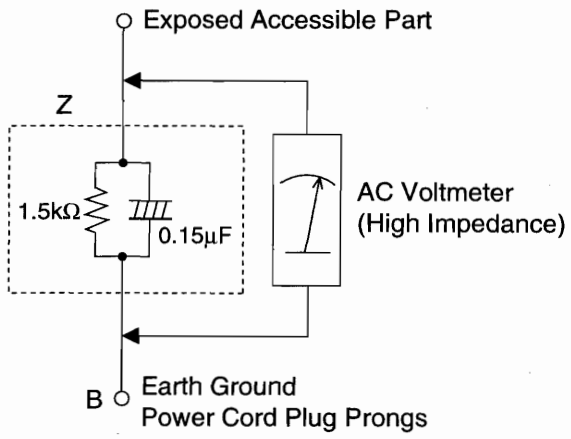


Fig. 2

Table 2 : Leakage current ratings for selected areas

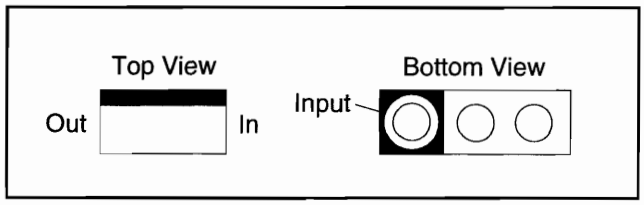
AC Line Voltage	Load Z	Leakage Current (i)	Earth Ground (B) to:
120 V	0.15µF CAP. & 1.5kΩ RES. Connected in parallel	i ≤ 0.5mA Peak	Exposed accessible parts

Note: This table is unofficial and for reference only. Be sure to confirm the precise values.

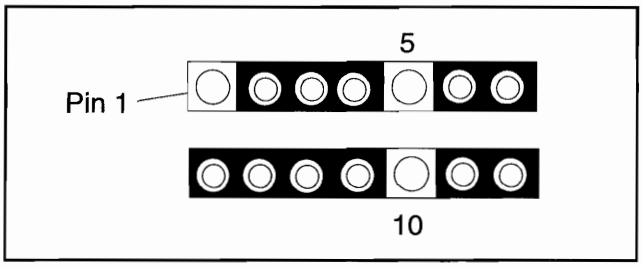
STANDARD NOTES FOR SERVICING

Circuit Board Indications

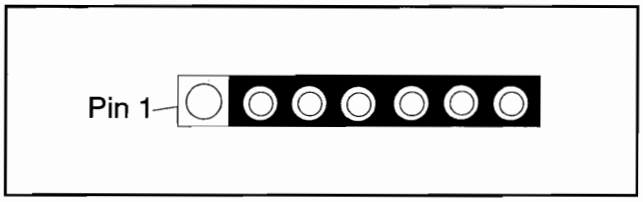
a. The output pin of the 3 pin Regulator ICs is indicated as shown.



b. For other ICs, pin 1 and every fifth pin are indicated as shown.

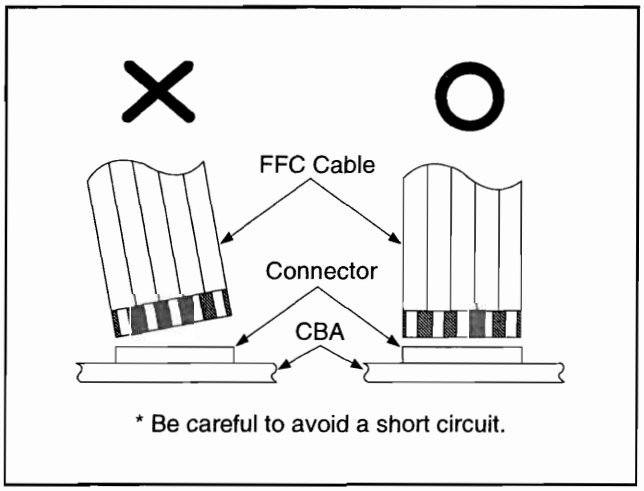


c. The 1st pin of every male connector is indicated as shown.



Instructions for Connectors

1. When you connect or disconnect the FFC (Flexible Foil Connector) cable, be sure to first disconnect the AC cord.
2. FFC (Flexible Foil Connector) cable should be inserted parallel into the connector, not at an angle.



How to Remove / Install Flat Pack-IC

1. Removal

With Hot-Air Flat Pack-IC Desoldering Machine:

(1) Prepare the hot-air flat pack-IC desoldering machine, then apply hot air to the Flat Pack-IC (about 5 to 6 seconds). (Fig. S-1-1)

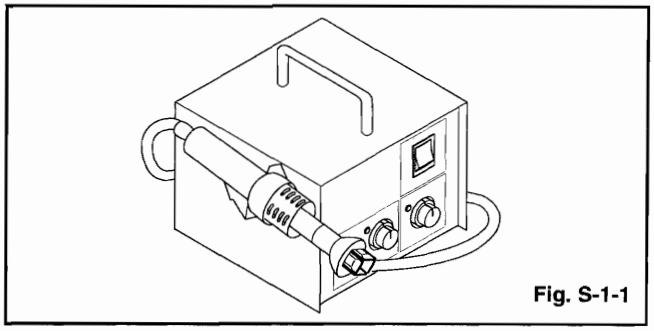


Fig. S-1-1

(2) Remove the flat pack-IC with tweezers while applying the hot air.

(3) Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)

(4) Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

Caution:

1. Do not supply hot air to the chip parts around the flat pack-IC for over 6 seconds because damage to the chip parts may occur. Put masking tape around the flat pack-IC to protect other parts from damage. (Fig. S-1-2)
2. The flat pack-IC on the CBA is affixed with glue, so be careful not to break or damage the foil of each pin or the solder lands under the IC when removing it.

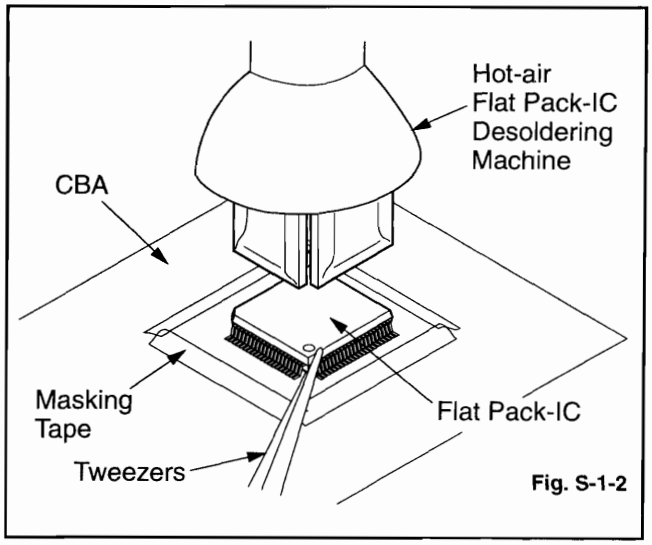


Fig. S-1-2

With Soldering Iron:

(1) Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)

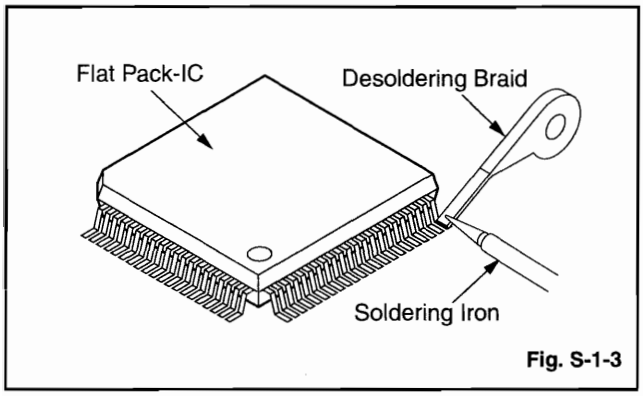


Fig. S-1-3

(2) Lift each lead of the flat pack-IC upward one by one, using a sharp pin or wire to which solder will not adhere (iron wire). When heating the pins, use a fine tip soldering iron or a hot air desoldering machine. (Fig. S-1-4)

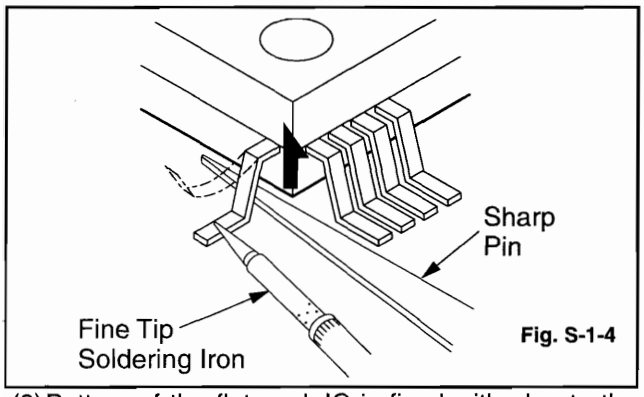


Fig. S-1-4

(3) Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)

(4) Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

With Iron Wire:

(1) Using desoldering braid, remove the solder from all pins of the flat pack-IC. When you use solder flux which is applied to all pins of the flat pack-IC, you can remove it easily. (Fig. S-1-3)

(2) Affix the wire to a workbench or solid mounting point, as shown in Fig. S-1-5.

(3) While heating the pins using a fine tip soldering iron or hot air blower, pull up the wire as the solder melts so as to lift the IC leads from the CBA contact pads as shown in Fig. S-1-5.

(4) Bottom of the flat pack-IC is fixed with glue to the CBA; when removing entire flat pack-IC, first apply soldering iron to center of the flat pack-IC and heat up. Then remove (glue will be melted). (Fig. S-1-6)

(5) Release the flat pack-IC from the CBA using tweezers. (Fig. S-1-6)

Note:

When using a soldering iron, care must be taken to ensure that the flat pack-IC is not being held by glue. When the flat pack-IC is removed from the CBA, handle it gently because it may be damaged if force is applied.

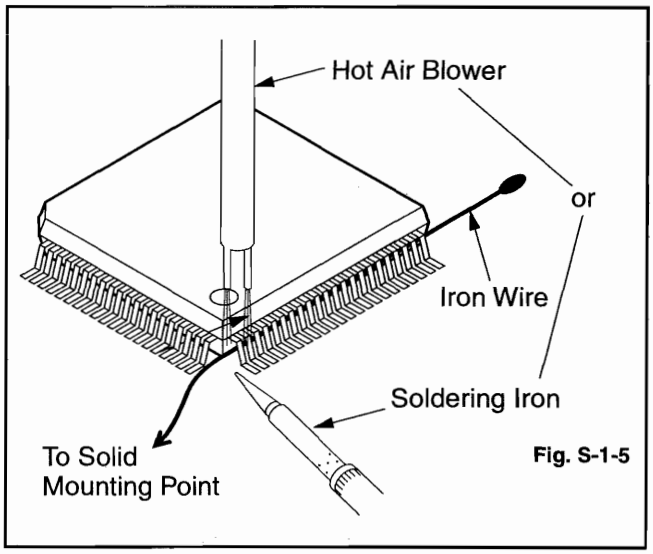


Fig. S-1-5

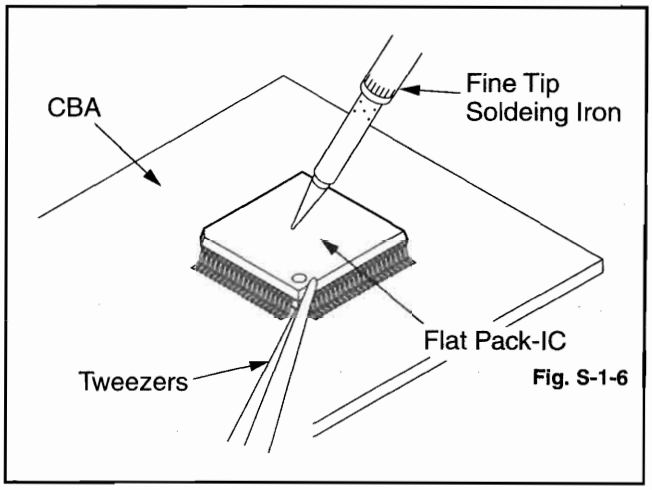


Fig. S-1-6

2. Installation

(1) Using desoldering braid, remove the solder from the foil of each pin of the flat pack-IC on the CBA so you can install a replacement flat pack-IC more easily.

(2) The " ● " mark on the flat pack-IC indicates pin 1. (See Fig. S-1-7.) Be sure this mark matches the 1 on the PCB when positioning for installation. Then pre- solder the four corners of the flat pack-IC. (See Fig. S-1-8.)

(3) Solder all pins of the flat pack-IC. Be sure that none of the pins have solder bridges.

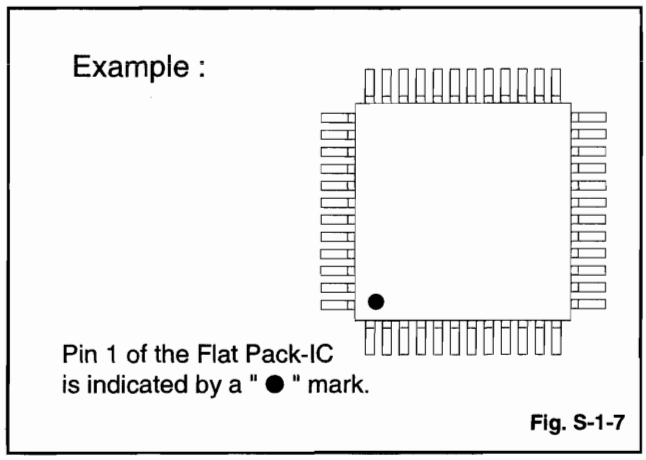


Fig. S-1-7

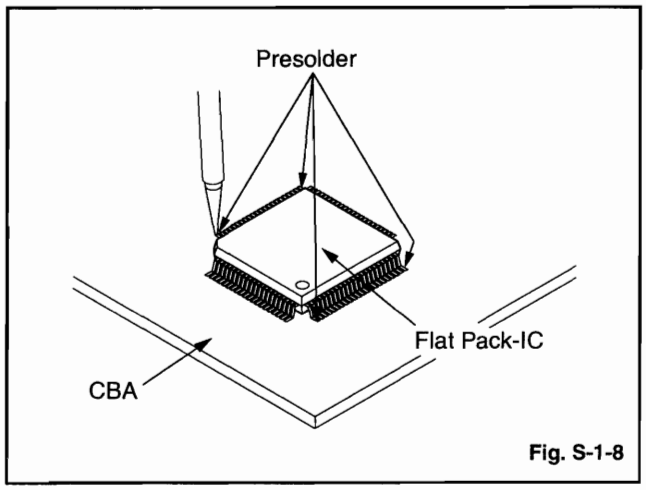


Fig. S-1-8

Instructions for Handling Semiconductors

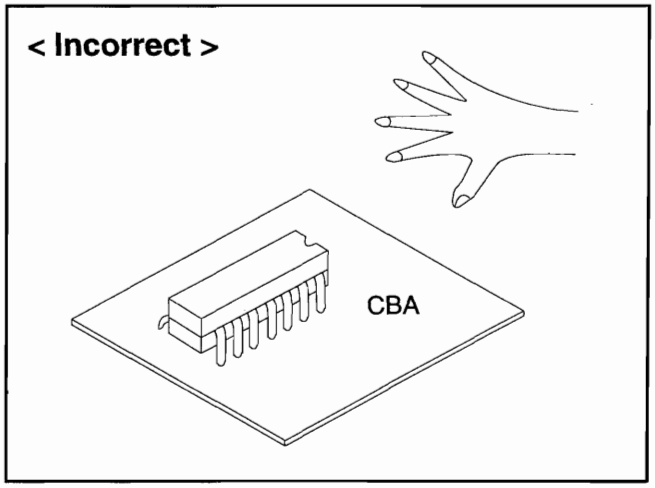
Electrostatic breakdown of the semiconductors may occur due to a potential difference caused by electrostatic charge during unpacking or repair work.

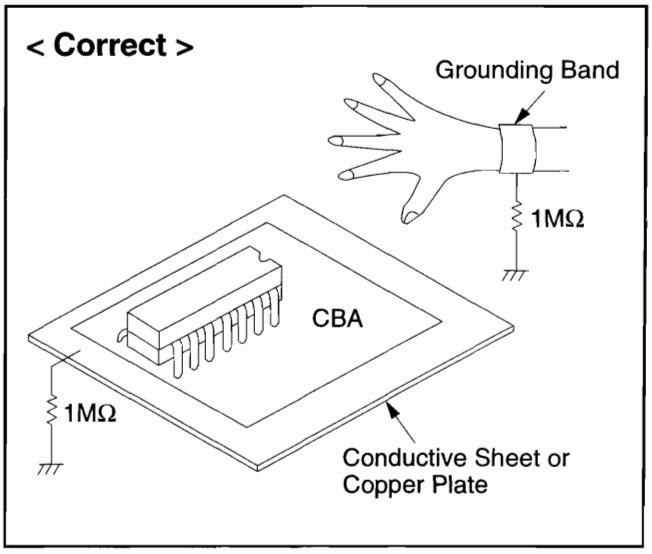
1. Ground for Human Body

Be sure to wear a grounding band (1MΩ) that is properly grounded to remove any static electricity that may be charged on the body.

2. Ground for Workbench

Be sure to place a conductive sheet or copper plate with proper grounding (1MΩ) on the workbench or other surface, where the semiconductors are to be placed. Because the static electricity charge on clothing will not escape through the body grounding band, be careful to avoid contacting semiconductors with your clothing.





PREPARATION FOR SERVICING

How to Enter the Service Mode

About Optical Sensors

Caution:

An optical sensor system is used for the Tape Start and End Sensors on this equipment. Carefully read and follow the instructions below. Otherwise the unit may operate erratically.

What to do for preparation

Insert a tape into the Deck Mechanism Assembly and press the PLAY button. The tape will be loaded into the Deck Mechanism Assembly. Make sure the power is on, connect TP502 (SENSOR INHIBITION) to TP511 (GROUND). This will stop the function of Tape Start Sensor, Tape End Sensor and Reel Sensors. (If these TPs are connected before plugging in the unit, the function of the sensors will stay valid.) See Fig. 1.

Note: Because the Tape End Sensors are inactive, do not run a tape all the way to the start or the end of the tape to avoid tape damage.

About REC-Safety Switch

Caution:

The REC-Safety Switch is directly mounted on the Main CBA. When the Deck Mechanism Assembly is removed from the Main CBA for servicing, this switch does not work automatically.

What to do for preparation

In order to record, press the Rec button while pushing REC-SAFETY SW on the Main CBA. See Fig. 1.

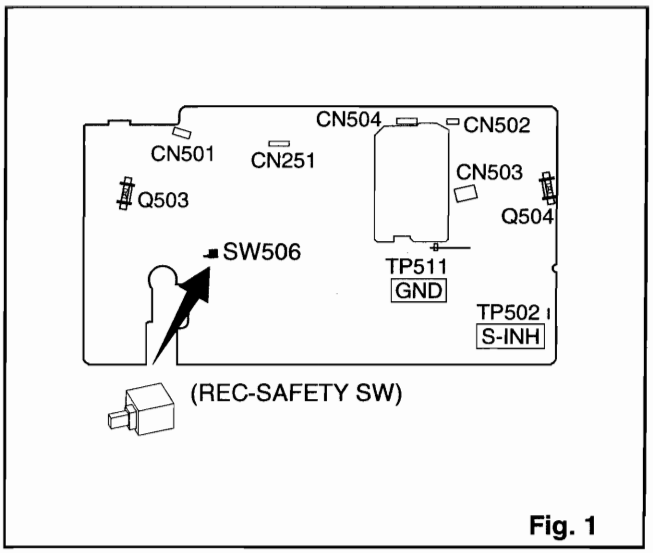
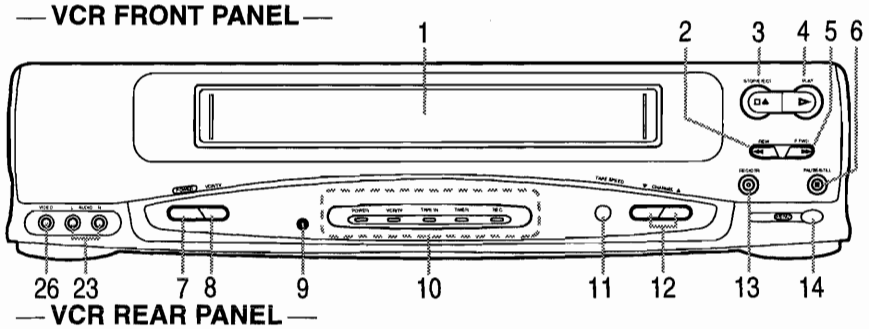


Fig. 1

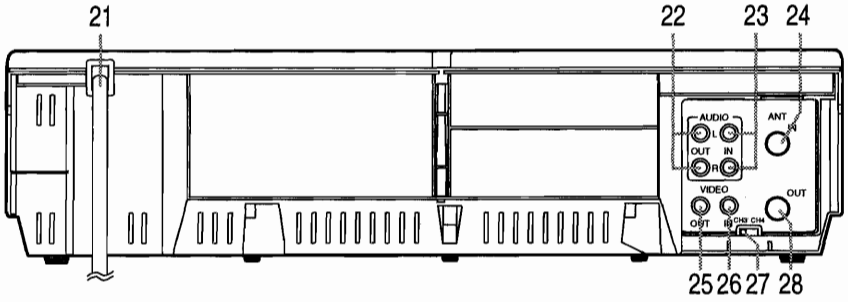
OPERATING CONTROLS AND FUNCTIONS

Model No.: SL260LB

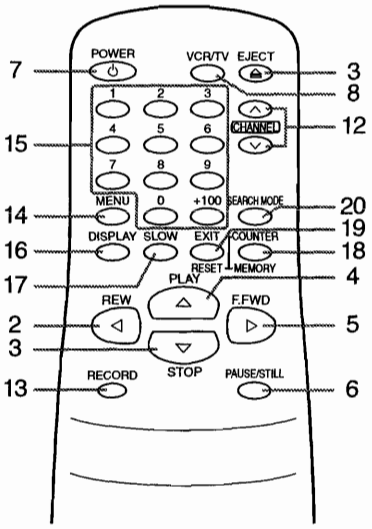
— VCR FRONT PANEL —



— VCR REAR PANEL —



— REMOTE CONTROL —



1. **Cassette Compartment**
2. **REW button–** Press to rewind the tape, or to view the picture rapidly in reverse during the playback mode. (Rewind Search)
   Press to cancel a setting of timer program. Press to correct digits when setting program (For example: setting clock or timer program). Press to add or delete channel numbers during channel preset.
3. **EJECT button–** Press to remove the tape from the VCR.

   STOP button– Press to stop the tape motion.
   Press to enter digits when setting program (For example: setting clock or timer program). Press to select the setting modes from the on screen menu.
4. **PLAY button–** Press to begin playback.
   Press to enter digits when setting program (For example: setting clock or timer program).
   Press to select the setting modes from the on screen menu.
5. **F.FWD button–** Press to rapidly advance the tape, or view the picture rapidly in forward during playback. (Forward Search)
   When setting program (For example: setting clock or timer program), press to determine your selection and proceed to the next step you want to input. Press to determine the setting modes from the on screen menu. Press to add or delete channel numbers during channel preset.
6. **PAUSE/STILL button–** Press to temporarily stop the tape during recording or to view a still picture during playback.

   Frame Advance function– Press to advance the picture by one frame at a time during still mode.
7. **POWER button–** Press to turn VCR on and off. Press to activate timer recording, when the timer program has been set.
8. **VCR/TV button–** Press to select TV or VCR mode.

   VCR position: to view playback, to monitor video recordings or watch TV using the VCR tuner.

   TV position: to watch TV or to view one program while recording another.
9. **Remote sensor window–** Receives the infrared signals from the remote control.
10. **Indicators**

    POWER indicator– Indicates that the power is turned on.

    VCR/TV indicator– Indicates that the VCR is in the VCR position.

    TAPE IN indicator– Indicates that there is a tape in the VCR.

    TIMER indicator– Indicates that the timer recording or OTR has been set.

    REC indicator– Indicates that it is recording. Flashes when a recording has been paused.

11. **TAPE SPEED button–** Press to choose the desired recording speed : SP/SLP. (only on the VCR)
12. **CHANNEL Up or Down buttons–** Press to select the desired channels for viewing or recording.

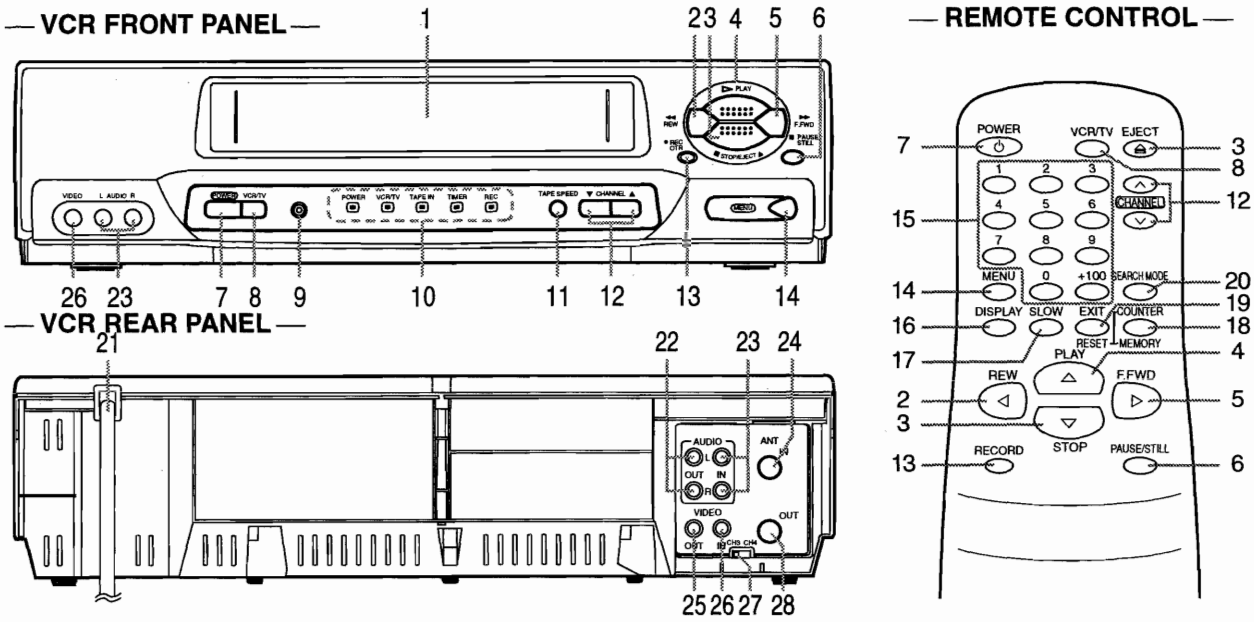
    Tracking function– Press to minimize video 'noise' (lines or dots on screen) during playback (only on the VCR) or slow mode.
    Press to stabilize the picture in the Still mode when the picture begins to vibrate vertically.
13. **RECORD button–** Press for manual recording.

    OTR button– Press to activate One Touch Recording. (only on the VCR)
14. **MENU button–** Press to display the menu on the TV screen. Press to exit the menu on the TV screen.
15. **NUMBER buttons–** Press to select desired channels for viewing or recording. To select channels from 1 to 9, first press "0" button then 1 to 9. (only on the remote control)

    +100 button– When selecting cable channels which are higher than 99, press this button first, then press the last two digits. (To select channel 125, first press "+100" button then press "2" and "5"). (only on the remote control)
16. **DISPLAY button–** Press to display the current time, channel number, real time tape counter, and other information on the TV screen. (only on the remote control)
    Each time you press this button, TV screen will change as shown. The status display (STOP, PLAY etc.) and the tape speed display (SP, LP (playback only), or SLP) will disappear after 5 seconds.
17. **SLOW button–** Press to start slow motion playback. (only on the remote control)
18. **COUNTER MEMORY button–** Press to set counter memory on and off. (only on the remote control)
19. **COUNTER RESET button–** Press to reset counter to 0:00:00. (only on the remote control)

    EXIT button– Press to exit the menu on the TV screen. (only on the remote control)
20. **SEARCH MODE button–** Press to perform a Time Search or an Index Search. (only on the remote control)
21. **Power cord–** Connect to a standard AC outlet (120V/60Hz).
22. **AUDIO OUT jacks–** Connect to the audio input jacks of your audio equipment or another VCR.
23. **AUDIO IN jacks–** Connect to the audio output jacks of your audio equipment or another VCR.
24. **ANT. IN terminal–** Connect to an antenna, Cable system or Satellite system.
25. **VIDEO OUT jack–** Connect to the video input jack of your video camera or another VCR.
26. **VIDEO IN jack–** Connect to the video output jack of your video camera or another VCR.
27. **CH3/CH4 selector switch–** Use to select a video output channel (3 or 4) for VCR playback.
28. **ANT. OUT terminal–** Connects to the antenna input terminal on your TV.

Model No.: 6260VB/EWV601



1. **Cassette Compartment**

2. **REW button–** Press to rewind the tape, or to view the picture rapidly in reverse during the playback mode. (Rewind Search)
   Press to cancel a setting of timer program. Press to correct digits when setting program (For example: setting clock or timer program). Press to add or delete channel numbers during channel preset.

3. **EJECT button–** Press to remove the tape from the VCR.

   STOP button– Press to stop the tape motion.
   Press to enter digits when setting program (For example: setting clock or timer program). Press to select the setting modes from the on screen menu.

4. **PLAY button–** Press to begin playback.
   Press to enter digits when setting program (For example: setting clock or timer program).
   Press to select the setting modes from the on screen menu.

5. **F.FWD button–** Press to rapidly advance the tape, or view the picture rapidly in forward during playback. (Forward Search)
   When setting program (For example: setting clock or timer program), press to determine your selection and proceed to the next step you want to input. Press to determine the setting modes from the on screen menu. Press to add or delete channel numbers during channel preset.

6. **PAUSE/STILL button–** Press to temporarily stop the tape during recording or to view a still picture during playback.

   Frame Advance function– Press to advance the picture by one frame at a time during still mode.

7. **POWER button–** Press to turn VCR on and off. Press to activate timer recording, when the timer program has been set.

8. **VCR/TV button–** Press to select TV or VCR mode.

   VCR position: to view playback, to monitor video recordings or watch TV using the VCR tuner.

   TV position: to watch TV or to view one program while recording another.

9. **Remote sensor window–** Receives the infrared signals from the remote control.

10. **Indicators**

    POWER indicator– Indicates that the power is turned on.

    VCR/TV indicator– Indicates that the VCR is in the VCR position.

    TAPE IN indicator– Indicates that there is a tape in the VCR.

    TIMER indicator– Indicates that the timer recording or OTR has been set.

    REC indicator– Indicates that it is recording. Flashes when a recording has been paused.

11. **TAPE SPEED button–** Press to choose the desired recording speed : SP/SLP. (only on the VCR)

12. **CHANNEL Up or Down buttons–** Press to select the desired channels for viewing or recording.

    Tracking function– Press to minimize video 'noise' (lines or dots on screen) during playback (only on the VCR) or slow mode.
    Press to stabilize the picture in the Still mode when the picture begins to vibrate vertically.

13. **RECORD button–** Press for manual recording.

    OTR button– Press to activate One Touch Recording. (only on the VCR)

14. **MENU button–** Press to display the menu on the TV screen. Press to exit the menu on the TV screen.

15. **NUMBER buttons–** Press to select desired channels for viewing or recording. To select channels from 1 to 9, first press "0" button then 1 to 9. (only on the remote control)

    +100 button– When selecting cable channels which are higher than 99, press this button first, then press the last two digits. (To select channel 125, first press "+100" button then press "2" and "5"). (only on the remote control)

16. **DISPLAY button–** Press to display the current time, channel number, real time tape counter, and other information on the TV screen. (only on the remote control)
    Each time you press this button, TV screen will change as shown. The status display (STOP, PLAY etc.) and the tape speed display (SP, LP (playback only), or SLP) will disappear after 5 seconds.

17. **SLOW button–** Press to start slow motion playback. (only on the remote control)

18. **COUNTER MEMORY button–** Press to set counter memory on and off. (only on the remote control)

19. **COUNTER RESET button–** Press to reset counter to 0:00:00. (only on the remote control)

    EXIT button– Press to exit the menu on the TV screen. (only on the remote control)

20. **SEARCH MODE button–** Press to perform a Time Search or an Index Search. (only on the remote control)

21. **Power cord–** Connect to a standard AC outlet (120V/60Hz).

22. **AUDIO OUT jacks–** Connect to the audio input jacks of your audio equipment or another VCR.

23. **AUDIO IN jacks–** Connect to the audio output jacks of your audio equipment or another VCR.

24. **ANT. IN terminal–** Connect to an antenna, Cable system or Satellite system.

25. **VIDEO OUT jack–** Connect to the video input jack of your video camera or another VCR.

26. **VIDEO IN jack–** Connect to the video output jack of your video camera or another VCR.

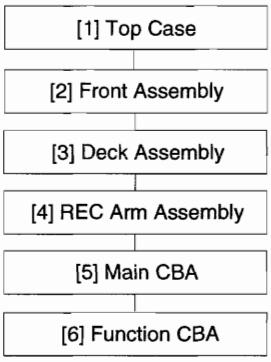
27. **CH3/CH4 selector switch–** Use to select a video output channel (3 or 4) for VCR playback.

28. **ANT. OUT terminal–** Connects to the antenna input terminal on your TV.

CABINET DISASSEMBLY INSTRUCTIONS

1. Disassembly Flowchart

This flowchart indicates the disassembly steps to gain access to item(s) to be serviced. When reassembling, follow the steps in reverse order. Bend, route, and dress the cables as they were originally.



Disassembly Method

ID/ LOC. No.	PART	REMOVAL		
		Fig. No.	REMOVE/ *UNHOOK/UNLOCK/ RELEASE/UNPLUG/ DESOLDER	Note
[1]	Top Case	1	3(S-1)	-
[2]	Front Assembly	2	*3(L-1), *4(L-2)	-
[3]	Deck Assembly	3	5(S-2), *(CN251, CN501, CN502, CN503, CN504)	1, 2
[4]	REC Arm Assembly	3	----------	-
[5]	Main CBA	4	*2(L-4)	-
[6]	Function CBA	4	*(L-3), Desolder	3
↓ ①	↓ ②	↓ ③	↓ ④	↓ ⑤

①: Identification (location) No. of parts in the figures

②: Name of the part

③: Figure Number for reference

④: Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
P=Spring, L=Locking Tab, S=Screw,
CN=Connector
*=Unhook, Unlock, Release, Unplug, or Desolder
e.g. 2(S-2) = two Screws (S-2),
2(L-2) = two Locking Tabs (L-2)

⑤:Refer to "Reference Notes."

Reference Notes

CAUTION: Locking Tabs (L-1) and (L-2) are fragile. Be careful not to break them.

1. Remove five Screws (S-2). Then slowly lift the Deck Assembly up. Lifting Deck Assembly disconnects five Connectors (CN251, CN501, CN502, CN503, CN504). (Fig. 3)
2. Before installing the Deck Assembly, be sure to place the pin of LD-SW on Main CBA as shown in Fig. 5. Then, install the Deck Assembly while aligning the hole of Cam Gear with the pin of LD-SW, the shaft of Cam Gear with the hole of LD-SW as shown in Fig. 5.
3. After removing the Main CBA, desolder from bottom of the Main CBA as shown in Fig. 4 to remove the Function CBA.

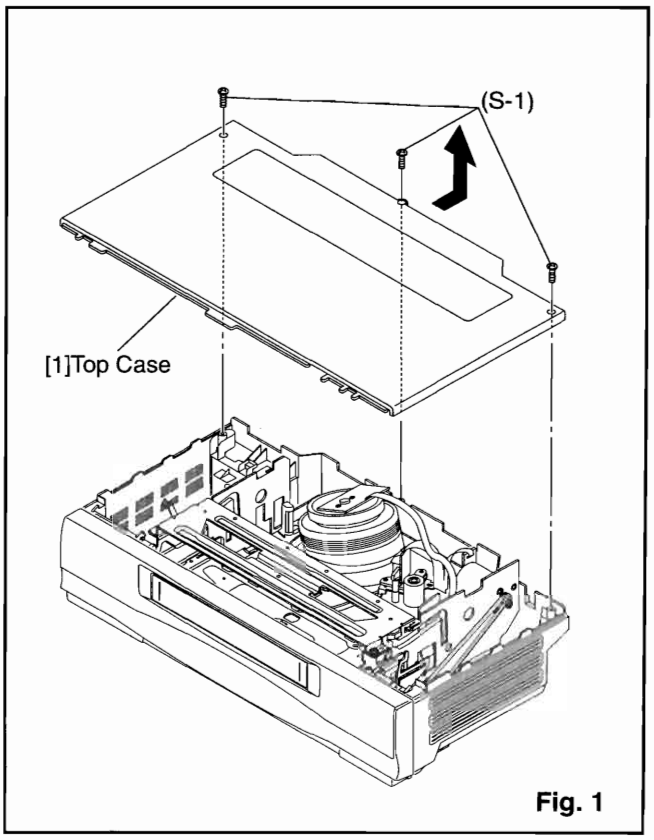


Fig. 1

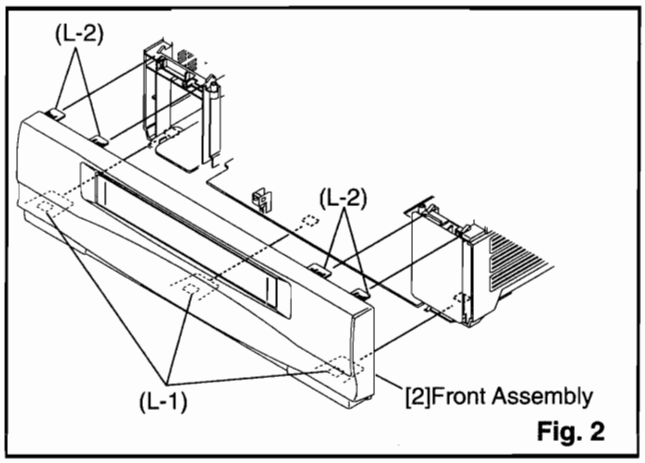


Fig. 2

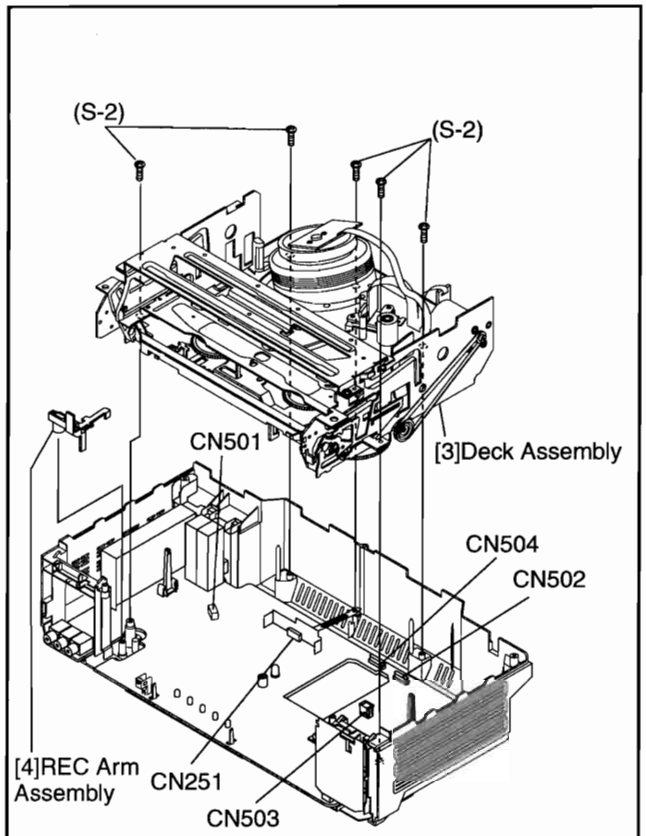


Fig. 3

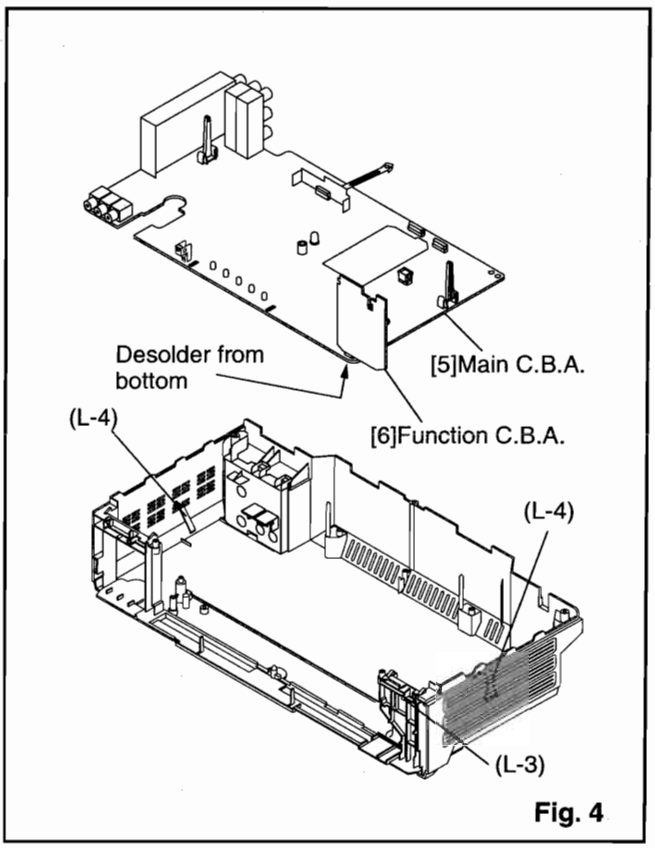


Fig. 4

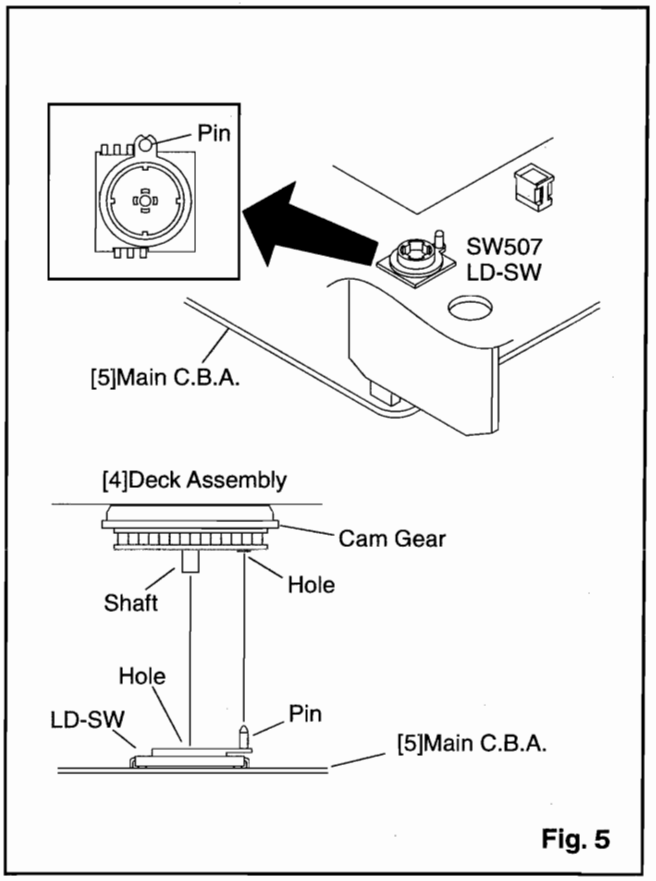


Fig. 5

ELECTRICAL ADJUSTMENT INSTRUCTIONS

General Note: "CBA" is an abbreviation for "Circuit Board Assembly."

NOTE:

1. Electrical adjustments are required after replacing circuit components and certain mechanical parts. It is important to do these adjustments only after all repairs and replacements have been completed. Also, do not attempt these adjustments unless the proper equipment is available.
2. To perform these alignment / confirmation procedures, make sure that the tracking control is set in the center position: Press either channel "▼" or "▲" button first, then the "PLAY" button (VCR's Front Panel only).

Test Equipment Required

1. Oscilloscope: Dual-trace with 10:1 probe, V-Range: 0.001~50V/Div., F-Range: DC~AC-20MHz
2. Alignment Tape (FL8A)

Head Switching Position Adjustment

Purpose:

To determine the Head Switching point during playback.

Symptom of Misadjustment:

May cause Head Switching noise or vertical jitter in the picture.

Test Point	Adj. Point	Mode	Input
TP751(V-OUT) TP302(RF-SW) TP511(GND)	VR501 (Switching Point) (MAIN CBA)	PLAY (SP)	----
Tape	**Measurement Equipment**	**Spec.**	
FL8A	Oscilloscope	6.5H±1H (412.7μs±60μs)	

Connections of Measurement Equipment

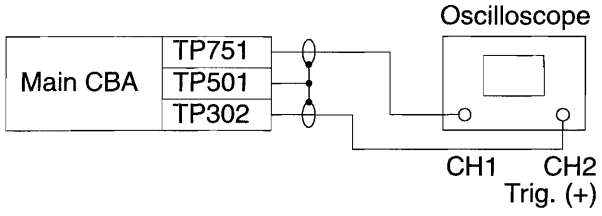
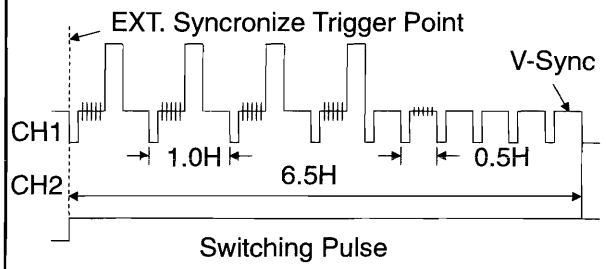


Figure 1

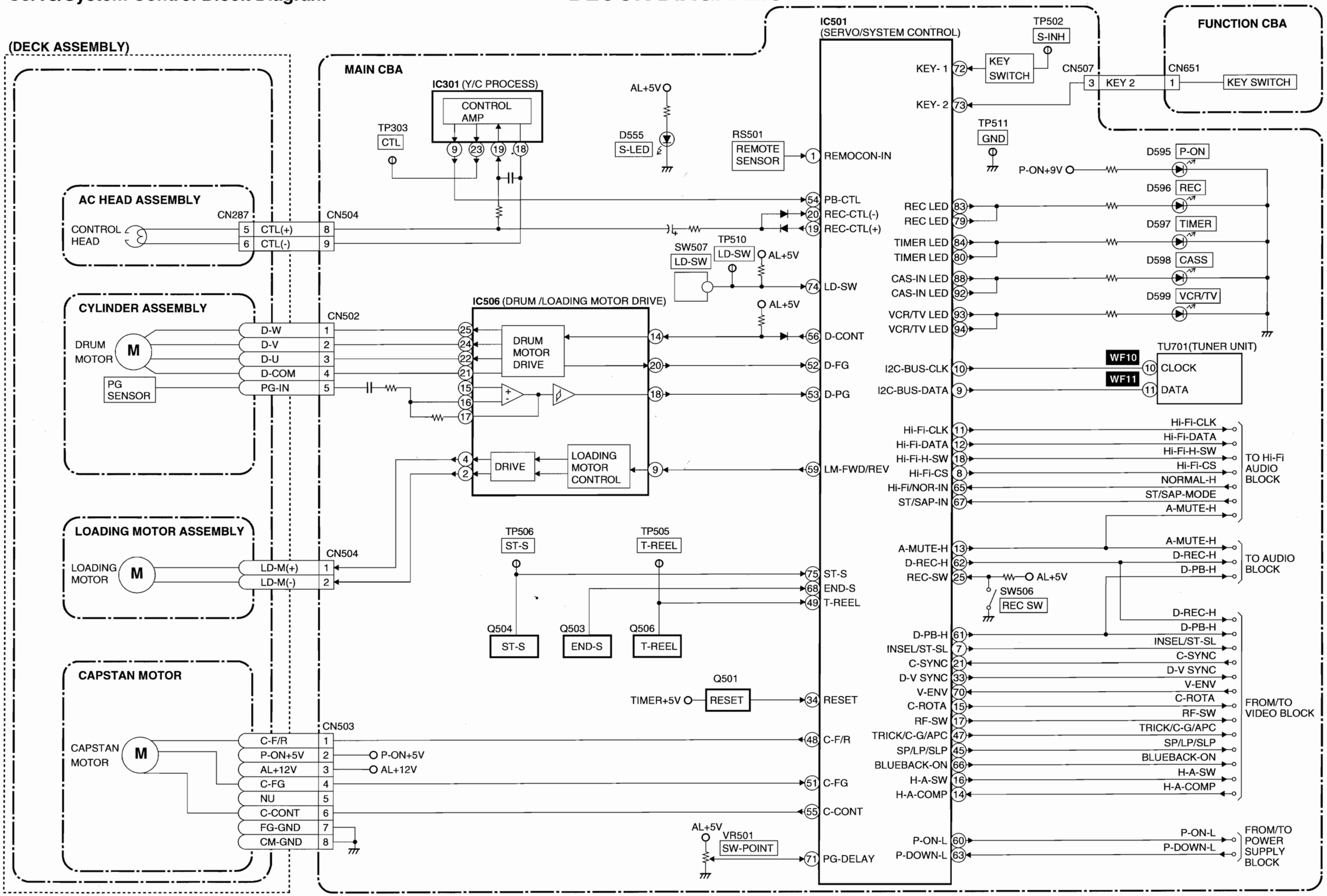


Reference Notes:

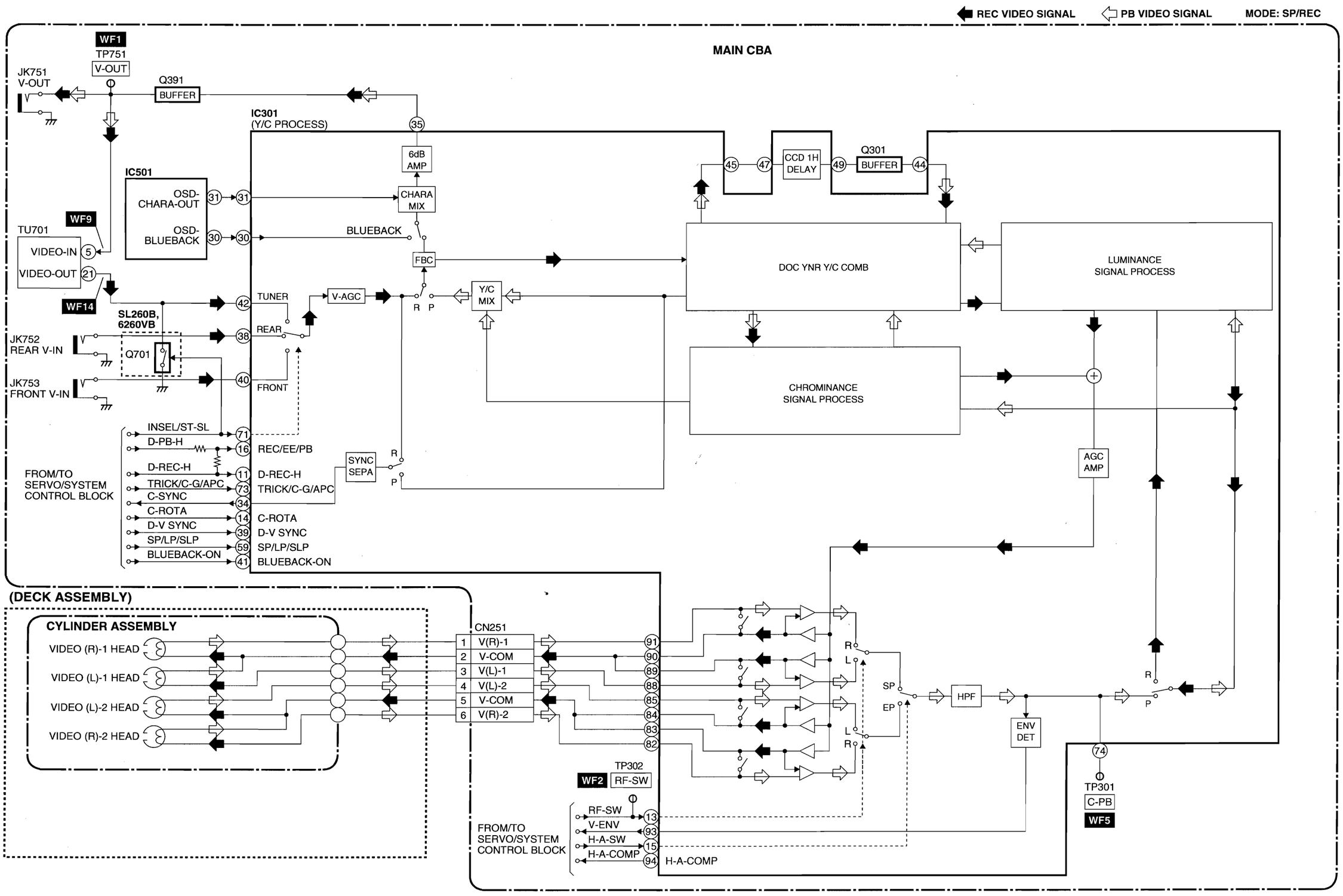
Play back the Alignment tape and adjust VR501 so that the V-sync front edge of the CH1 video output waveform is at the 6.5H(412.7μs) delayed position from the rising edge of the CH2 head switching pulse waveform.

BLOCK DIAGRAMS

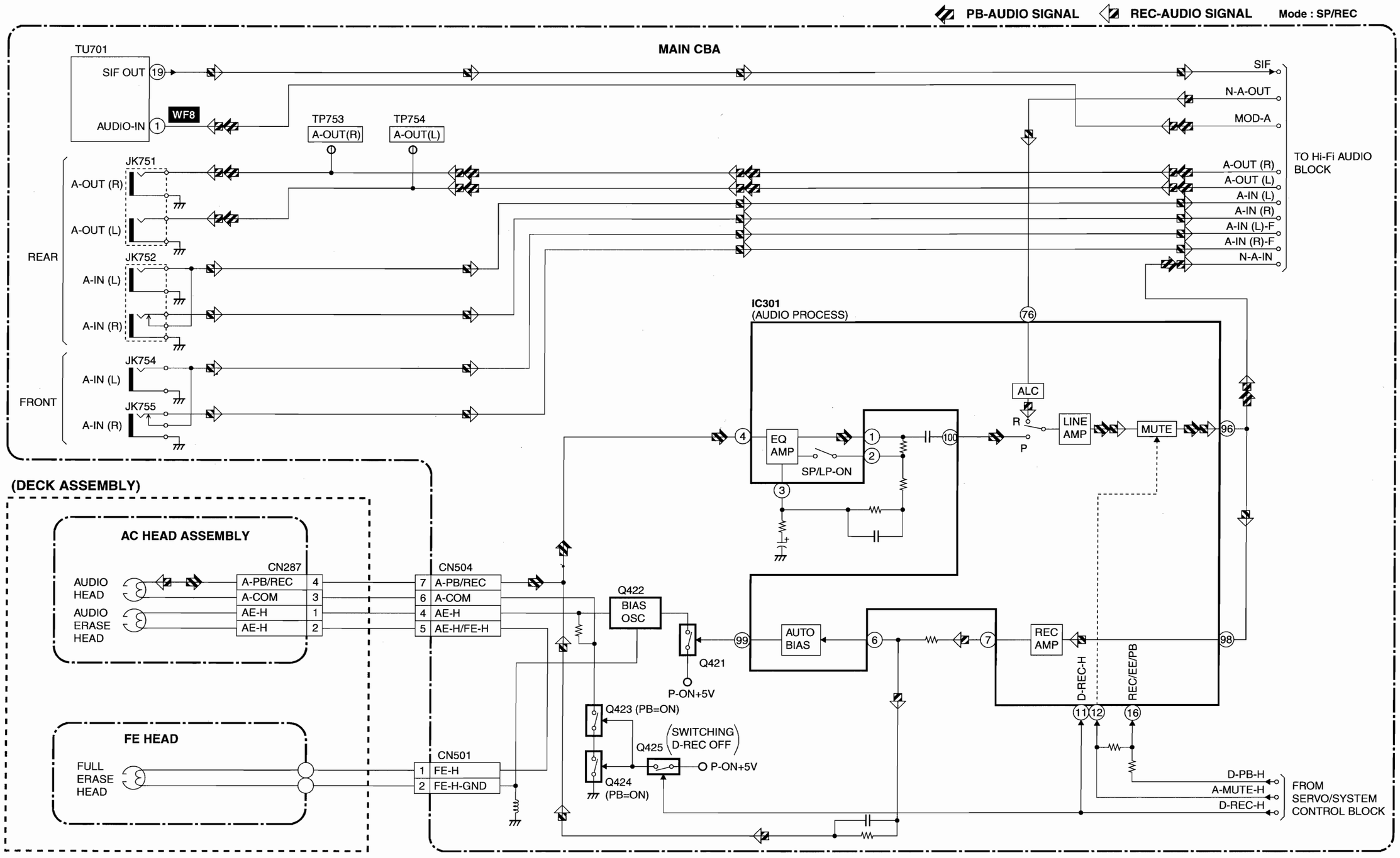
Servo/System Control Block Diagram



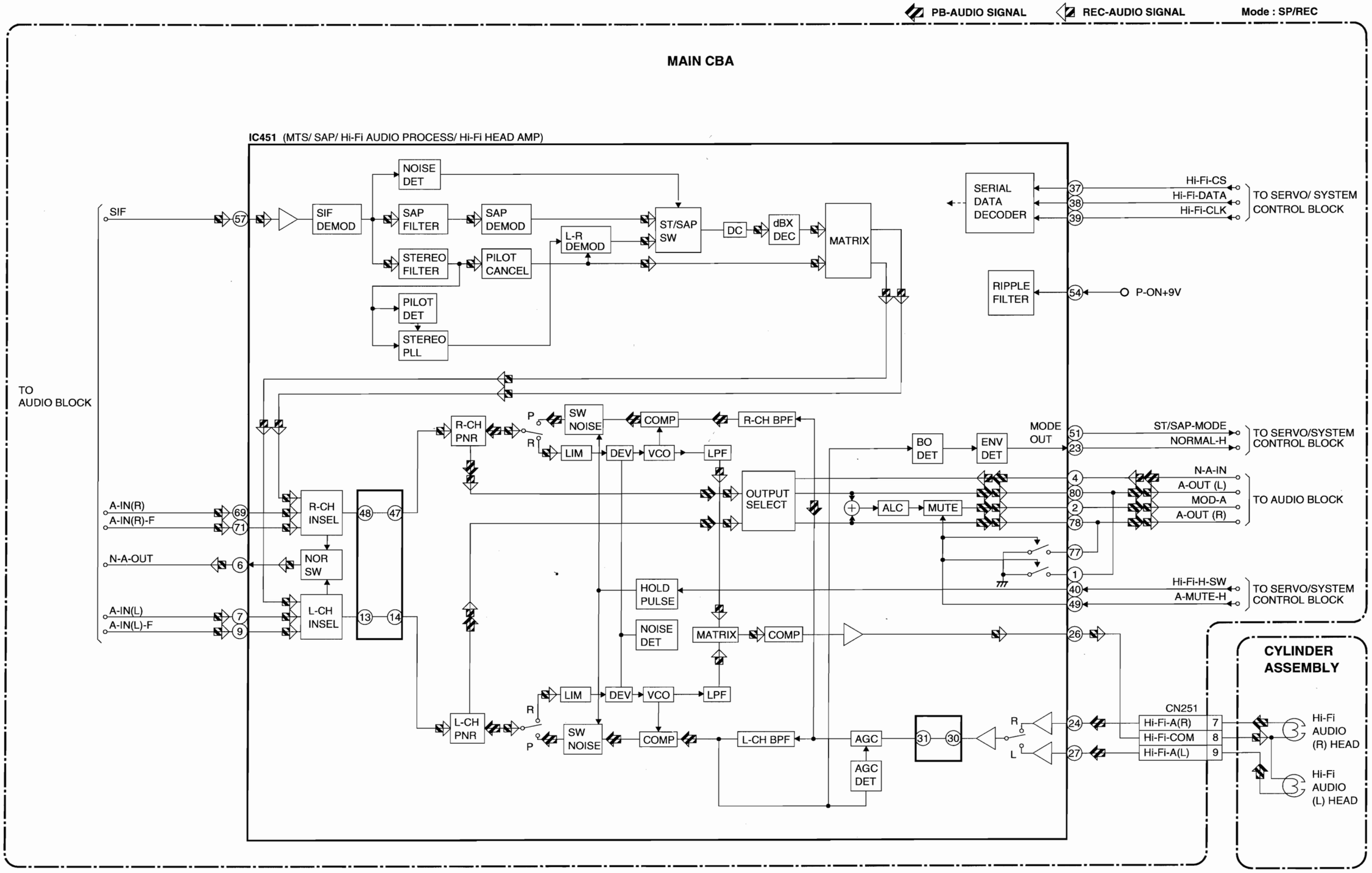
Video Block Diagram



Audio Block Diagram



Hi-Fi Audio Block Diagram

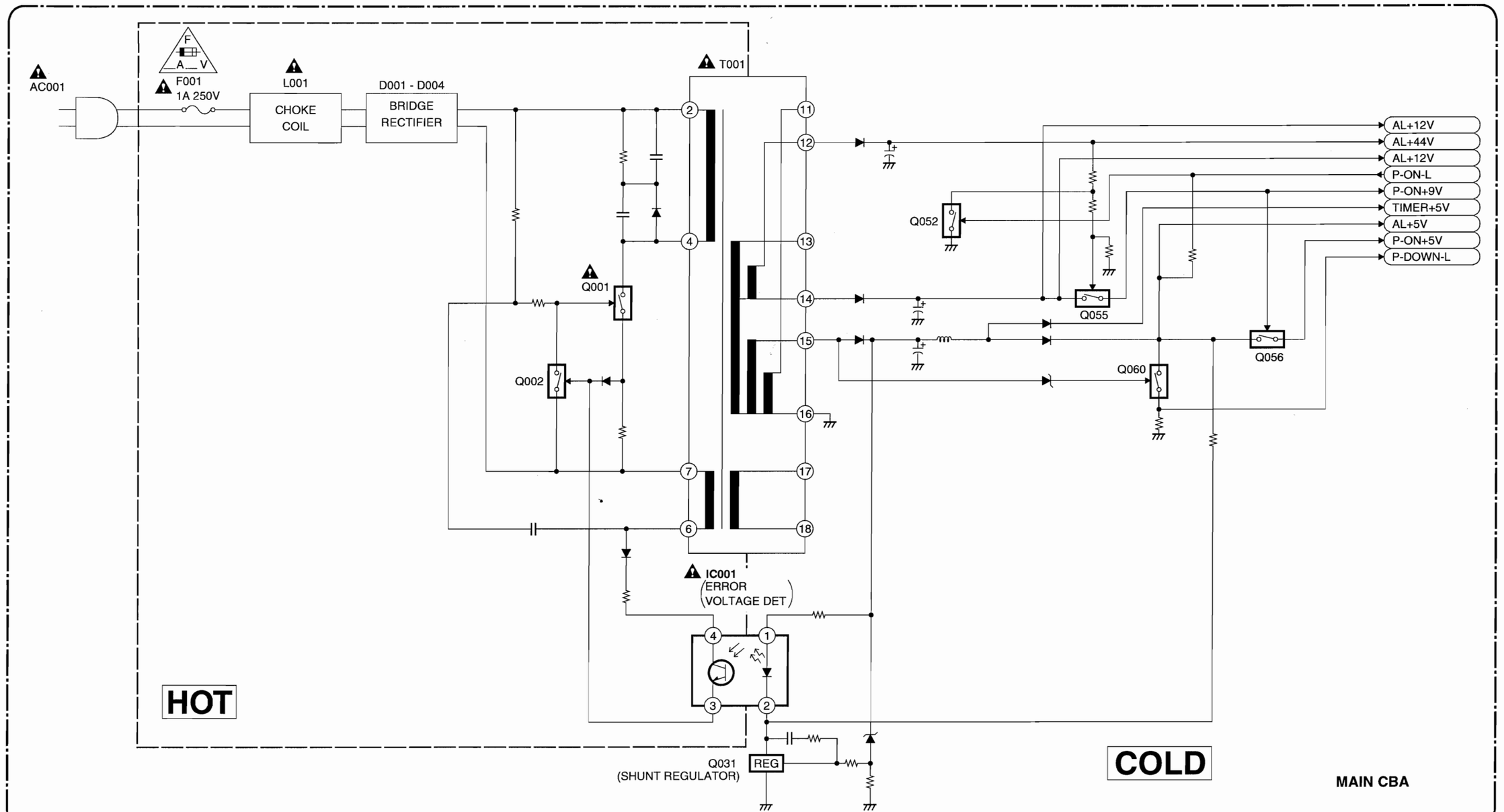


Power Supply Block Diagram

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE -REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole reprèsente un fusible à fusion rapide."

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.



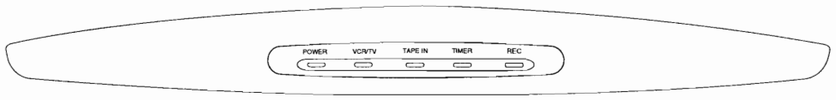
FUNCTION INDICATOR SYMBOLS

Note:

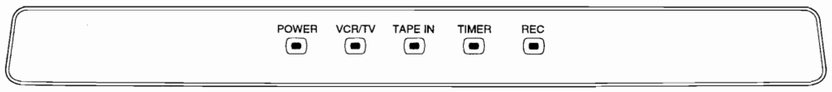
The following symbols will appear on the indicator panel to indicate the current mode or operation of the VCR. On-screen modes will also be momentarily displayed on the tv screen when you press the operation buttons.

Display panel

Model No. : SL260B



Model No. : 6260VB/EWV601

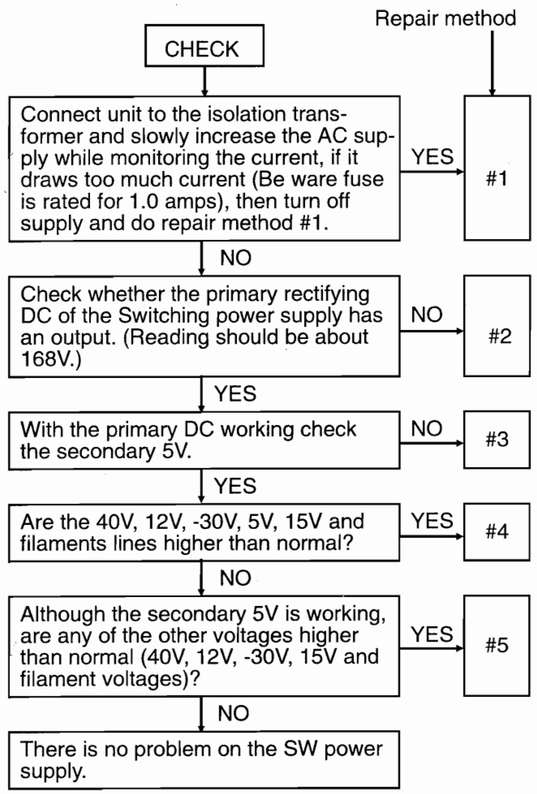


" H "= LED Light on, " L "= LED Light off

Led Mode	Indicator Active	
POWER	Power on = " H " Power off = " L "	
VCR/TV	VCR mode = " H " TV mode = " L "	
TAPE IN	Cassette in = " H " Cassette out = " L "	
1. When reel and capstan mechanism is not functioning correctly	Cassette in	Blinks at 0.8Hz interval
2. When tape loading mechanism is not functioning correctly	Cassette in	Blinks at 1.6Hz interval
3. When cassette loading mechanism is not functioning correctly	Cassette in	Blinks at 3.2Hz interval
4. When the drum is not working properly	Cassette in	Blinks at 6.4Hz interval
TIMER	Timer stand by = " H " One touch recording = " H " Timer recording = " H " General mode = " L "	
REC	REC mode = " H " REC pause General mode = " L "	Blinks at 0.8Hz interval

Power Supply Trouble Shooting Guide

It is highly recommended that a variable isolation transformer which can monitor current be used. (Alternatively a variable AC source which monitors current will do). Read directions below before power is added!


Repair method
CHECK
Connect unit to the isolation transformer and slowly increase the AC supply while monitoring the current, if it draws too much current (Be ware fuse is rated for 1.0 amps), then turn off supply and do repair method #1.
YES
#1
NO
Check whether the primary rectifying DC of the Switching power supply has an output. (Reading should be about 168V.)
NO
#2
YES
With the primary DC working check the secondary 5V.
NO
#3
YES
Are the 40V, 12V, -30V, 5V, 15V and filaments lines higher than normal?
YES
#4
NO
Although the secondary 5V is working, are any of the other voltages higher than normal (40V, 12V, -30V, 15V and filament voltages)?
YES
#5
NO
There is no problem on the SW power supply.

Repair method #1

(Power must be off)

Short circuit in the secondary side. check diode D013 and {(FIP display model only: D012, D014, D015, D016 and D017) or (LED display model only: D014, D015 and D016)}, switching FET (Q001), control transistor (Q002), diode (D006), and resistor (R014) replace as necessary.

Disconnect 40V diode (D013), 15V diode (D014), 12V diode (D015),
5V diode (D016) and {FIP display model only: -30V diode (D012) and filament voltage diode (D017)}Check the load continuity of 40V line, 15V line, 12V line, 5V line, -30V line and filament voltage line through a tester (resistance range).

If the tester indicates a lower resistance value around 0 ohm, the line is short-circuited.

Before repairing the switching power supply, find out the short-circuited area of such line and repair it.

If the tester does not indicate any low resistance value (around 0 ohm), no load is short-circuited and there is no problem.

2] Check for any defective parts while the secondary rectifying diodes are disconnected (D013, D014, D015, D016 and {FIP display model only: D012 and D017)} perform a diode check in both forward and reverse directions through a tester.

3] Remove the following components and check for defects: snubber diode (D051), switching FET (Q001), source resistor (R014), control transistor (Q002).

Repair method #2

Check the fuse 1.0A (F001), primary rectifying diodes (D001-D004) as possible problems. Remove the above mentioned parts and check them. The circuit which turns on switching FET (Q001) may be regarded as a possible cause, even if the load at the secondary side is shorted, it can't be detected because switching FET (Q001) isn't operating. Perform check according to the step 1 and 2 of repair method #1 and check the following parts:

(Remove the part from PCB)

Switching FET (Q001), source resistor (R014), gate resistor (R008) and start resistor (R004 and R005).

Repair method #3

A circuit to turn on switching FET (Q001) may not work and this may be regarded as a cause of trouble. Even if the load at the secondary side is short-circuited, it cannot be detected because switching FET (Q001) does not turn on. Therefore, perform check according to the steps 1] and 2] of the repair method #1 and execute the under-mentioned parts breakage check.

(Remove the part from PCB.)

switching FET (Q001), source resistor (R014), control transistor (Q002), gate resistor (R008) and start resistor (R004 and R005).

Repair method #4

The feedback circuit which is monitored by the output of voltage may not work and this may be regarded as a possible cause, remove control transistor Q002 and check for defects. More over, a photo coupler (IC001) and transistor (Q031) may be defective, replace any defective parts with factory originals.

Repair method #5

If the output voltage of the secondary side is slightly high, the line load may be in the "OPEN" state and this may be regarded as a cause of trouble. If there is no output voltage on the secondary side, the rectifying diodes (D013), (D014), (D015) and {FIP display model only only: (D012) and (D017)} may be defective.

SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

Warning

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark " ⚠ " in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Note:

1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ($K=10^3$, $M=10^6$).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in μF ($P=10^{-6}\mu F$).
5. All voltages are DC voltages unless otherwise specified.

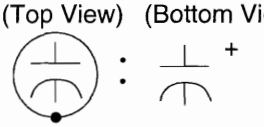
Capacitor Temperature Markings

Mark	Capacity change rate	Standard temperature	Temperature range
(B)	±10%	20℃	-25~+85℃
(F)	+30 -80%	20℃	-25~+85℃
(SR)	±15%	20℃	-25~+85℃
(Z)	+30 -80%	20℃	-10~+70℃

Capacitors and transistors are represented by the following symbols.

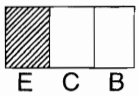
CBA Symbols

(Top View) (Bottom View)



: Electrolytic Capacitor

(Bottom View)



: Transistor or Digital Transistor

(Top View)

NPN Transistor

(Top View)

PNP Transistor

(Top View)

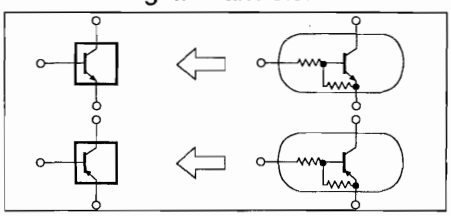
NPN Digital Transistor

(Top View)

PNP Digital Transistor

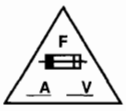
Schematic Diagram Symbols

Digital Transistor



LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

1. **CAUTION:**



FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION: POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.

2. **CAUTION:**

This symbol means fast operating fuse.
Ce symbole représente un fusible à fusion rapide.

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F001) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

3. **Note:**

(1) Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.

(2) To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Wire Connectors

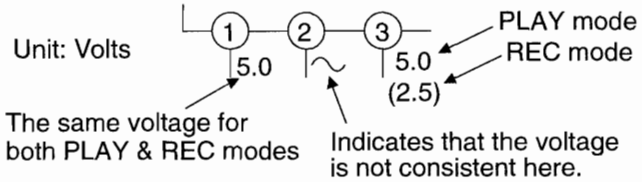
(1) Prefix symbol "CN" means "connector" (can disconnect and reconnect).

(2) Prefix symbol "CL" means "wire-solder holes of the PCB" (wire is soldered directly).

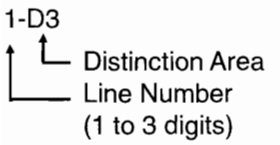
5. Note: Mark "•" is a leadless (chip) component.

6. Mode: SP/REC

7. Voltage indications for PLAY and REC modes on the schematics are as shown below:

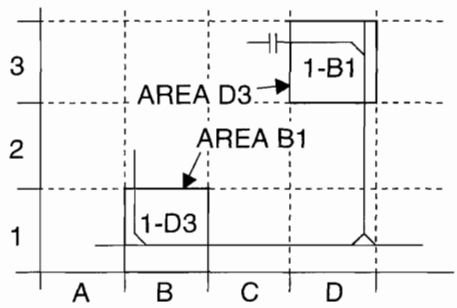


8. How to read converged lines



Examples:

1. "1-D3" means that line number "1" goes to area "D3".
2. "1-B1" means that line number "1" goes to area "B1".



9. Test Point Information

: Indicates a test point with a jumper wire across a hole in the PCB.

: Used to indicate a test point with a component lead on foil side.

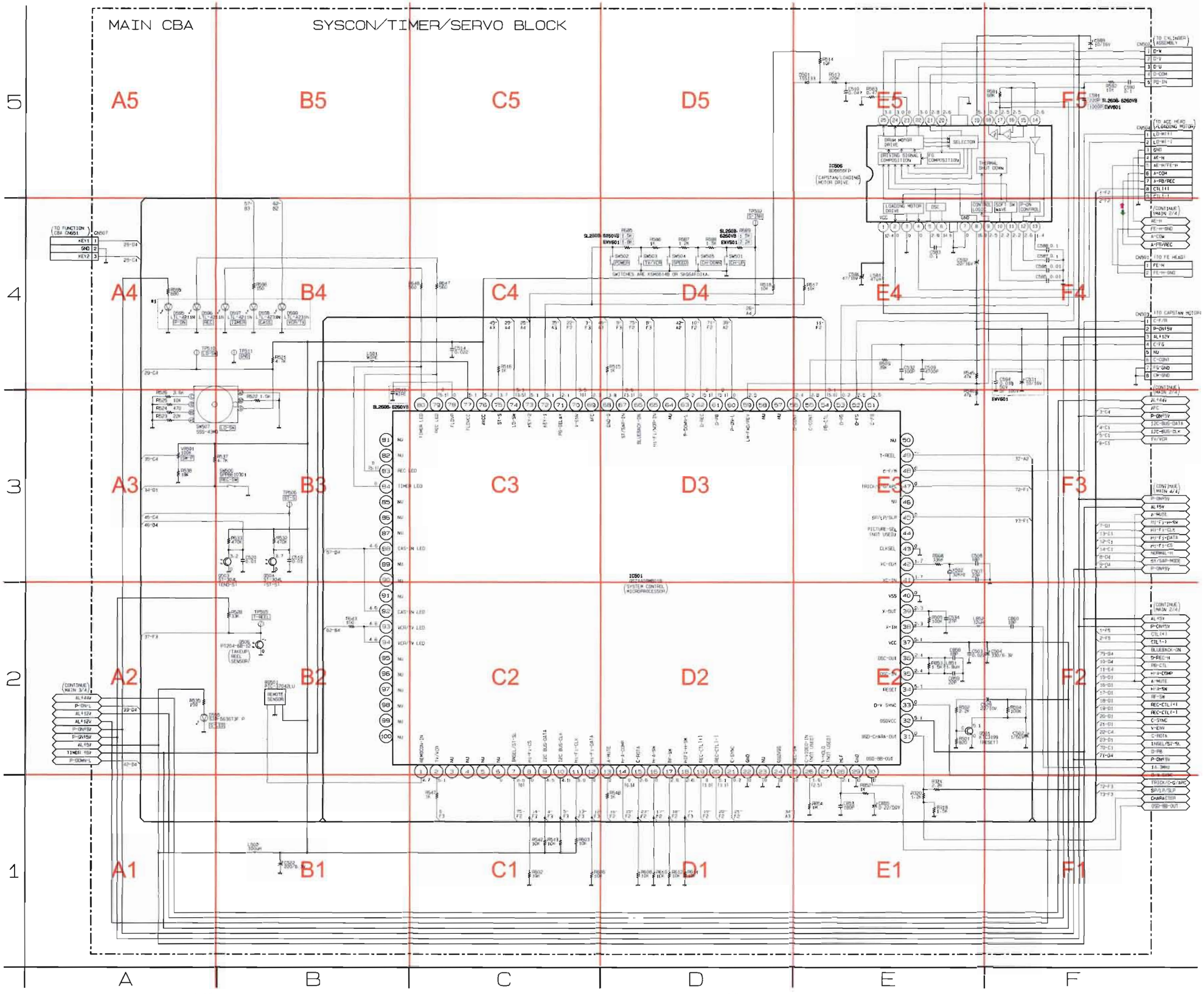
: Used to indicate a test point with no test pin.

: Used to indicate a test point with a test pin.

Main 1/4 Schematic Diagram

*1 **Note:**
When it is necessary to replace one or more of the following Diodes, all five should be replaced: D595, D596, D597, D598, D599.

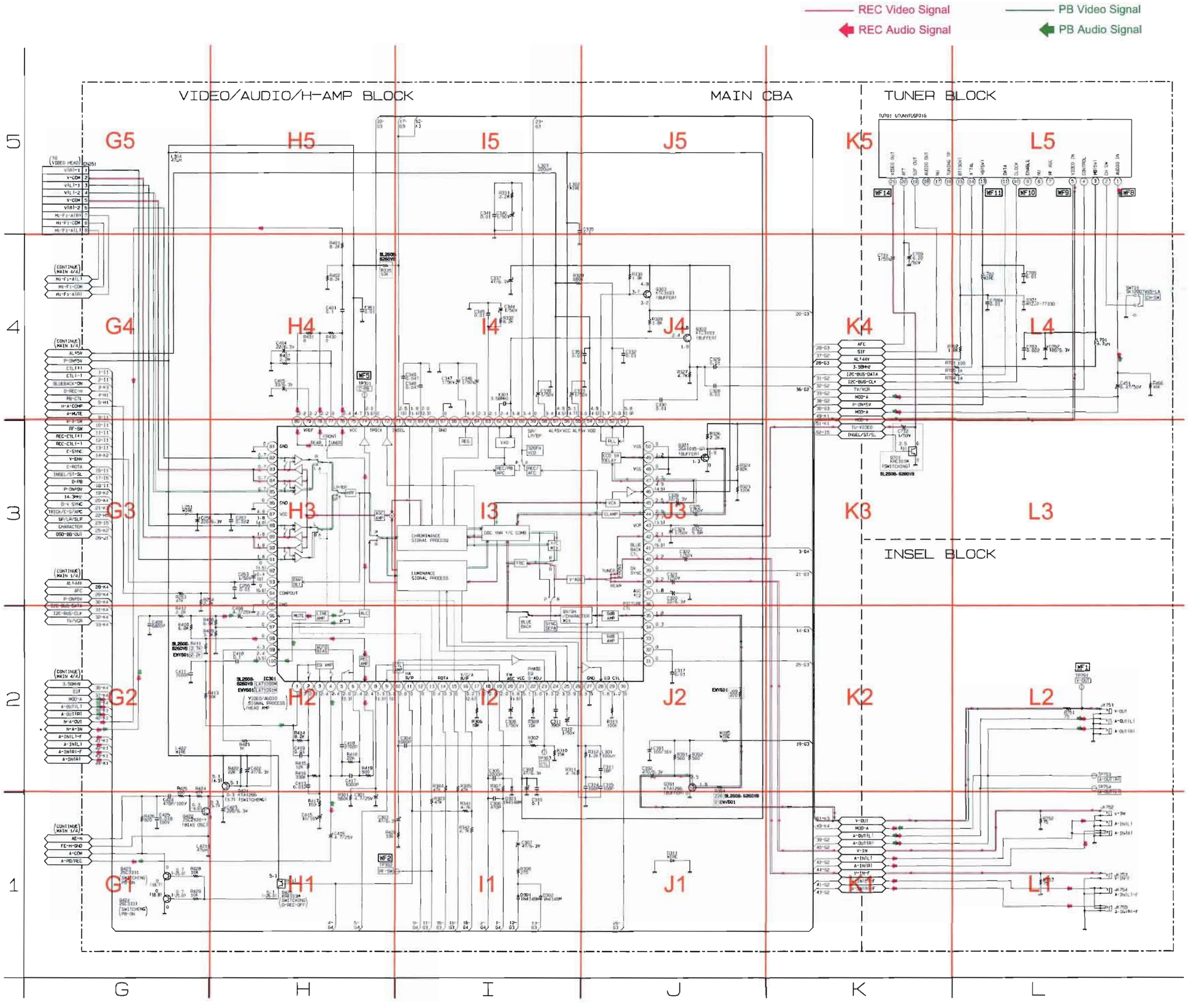
REC Video Signal
REC Audio Signal
PB Video Signal
PB Audio Signal



Main 1/4 Schematic Diagram

Ref. NO	Position
ICS	
IC501	D-3
IC506	E-5
TRANSISTORS	
Q501	E-2
Q503	A-3
Q504	B-3
Q506	B-2
CONNECTORS	
CN501	F-4
CN502	F-5
CN503	F-4
CN504	F-5
VARIABLE RESISTORS	
VR501	A-3
TEST POINTS	
TP502	D-4
TP505	B-2
TP506	B-3
TP510	A-4
TP511	B-4

Main 2/4 Schematic Diagram



Main 2/4 Schematic Diagram

Ref.NO	Position
ICS	
IC301	H-2
TRANSISTORS	
Q301	J-3
Q302	J-4
Q303	J-4
Q391	J-2
Q421	H-2
Q422	G-1
Q423	G-1
Q424	G-1
Q425	H-1
Q701	K-3
CONNECTORS	
CN251	G-5
TEST POINTS	
TP301	I-4
TP302	H-1
TP303	I-2
TP751	L-2
TP753	L-2
TP754	L-2

Main 3/4 Schematic Diagram

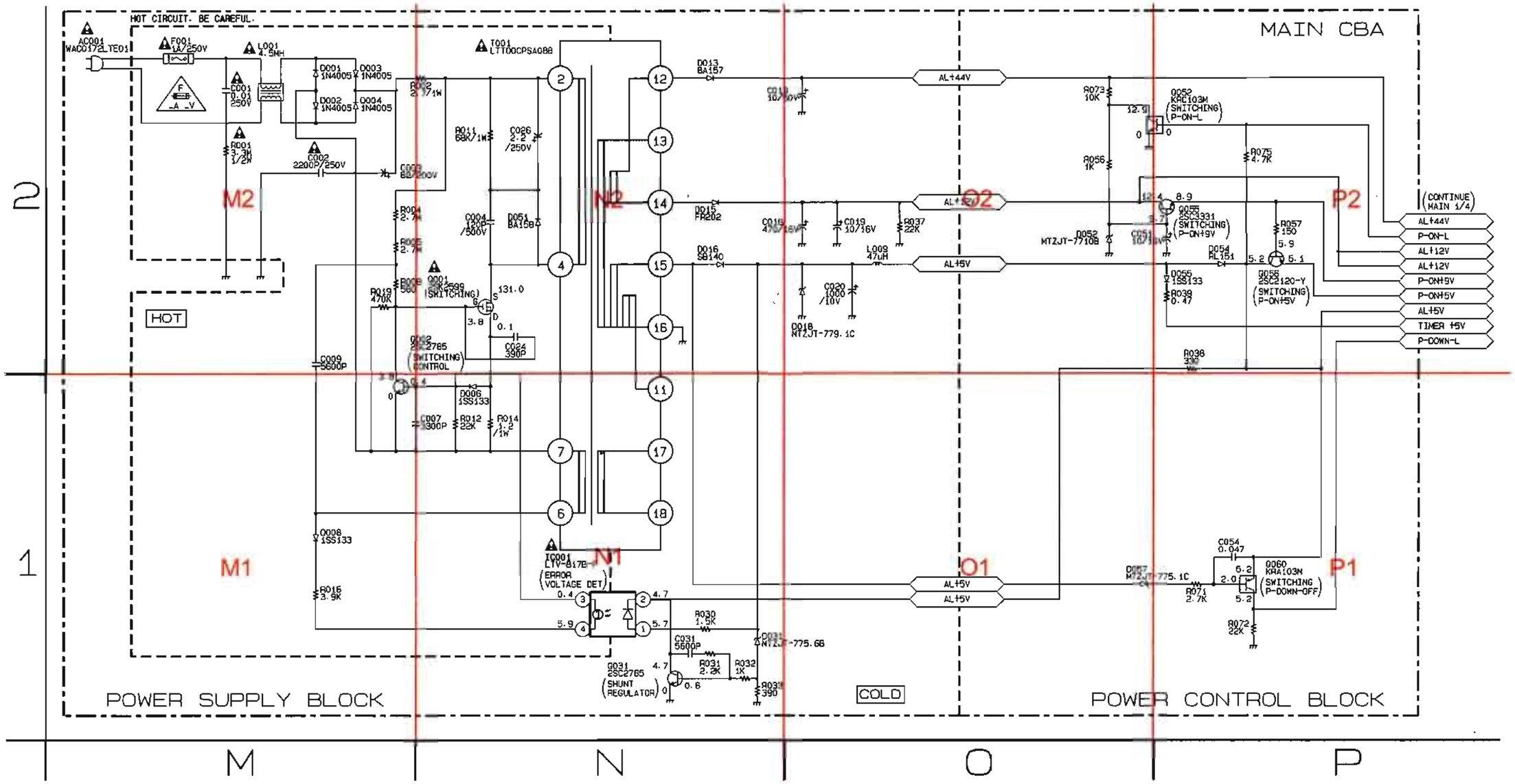
CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole représente un fusible à fusion rapide."

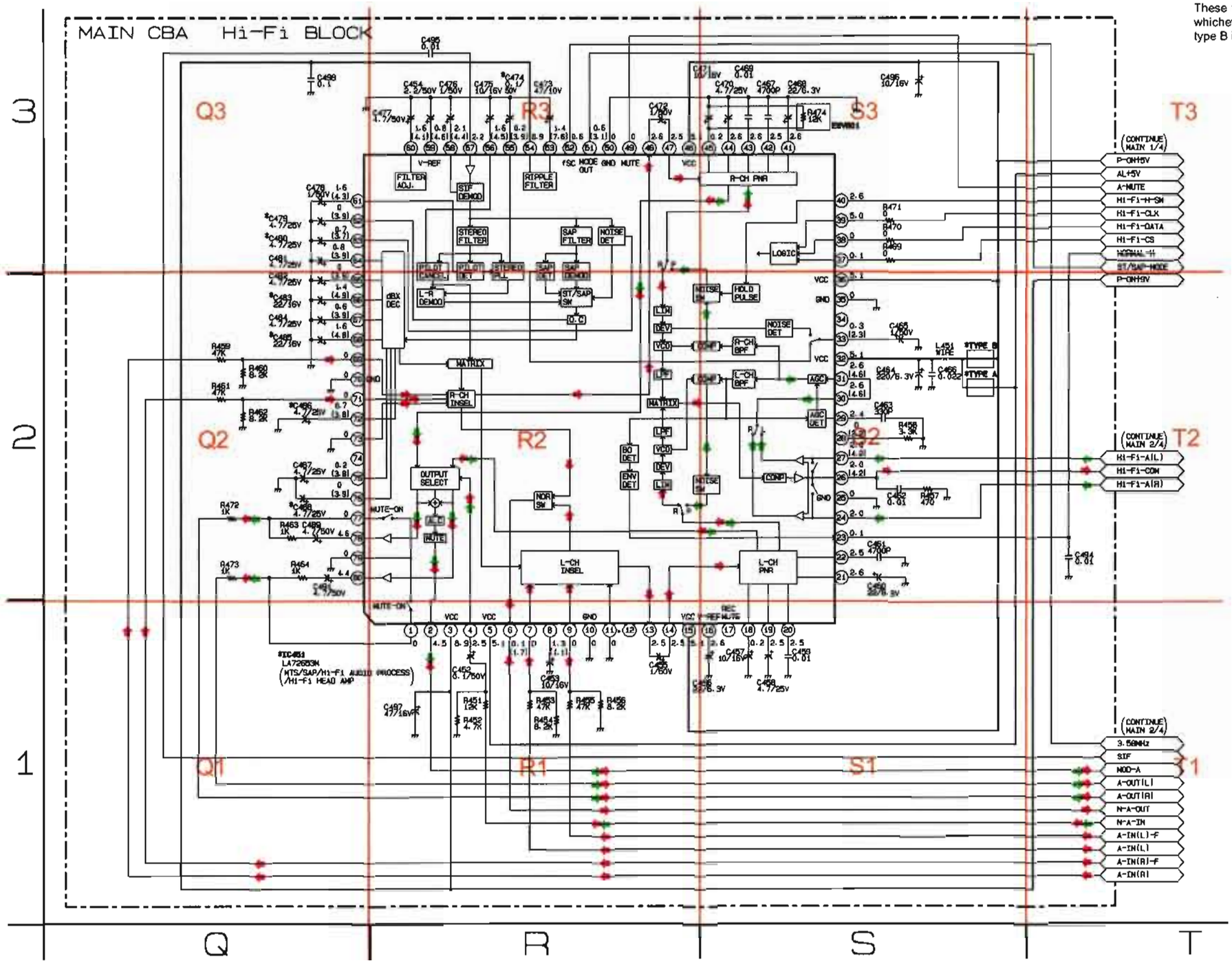
Main 3/4 Schematic Diagram

Ref.NO	Position
ICS	
IC001	N-1
TRANSISTORS	
Q001	N-2
Q002	M-2
Q031	N-1
Q052	O-2
Q055	O-2
Q056	P-2
Q060	P-1



Main 4/4 Schematic Diagram

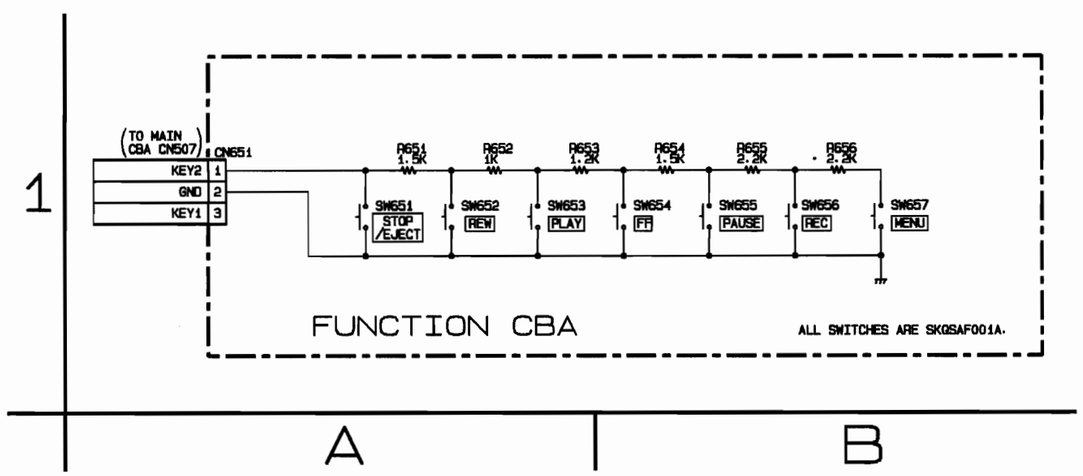
REC Video Signal
REC Audio Signal
PB Video Signal
PB Audio Signal



*1 **Note:**
IC451 is either type A or type B.
These two types are exchangeable and can be equally used whichever the model is. The difference between type A and type B is shown in the table below.

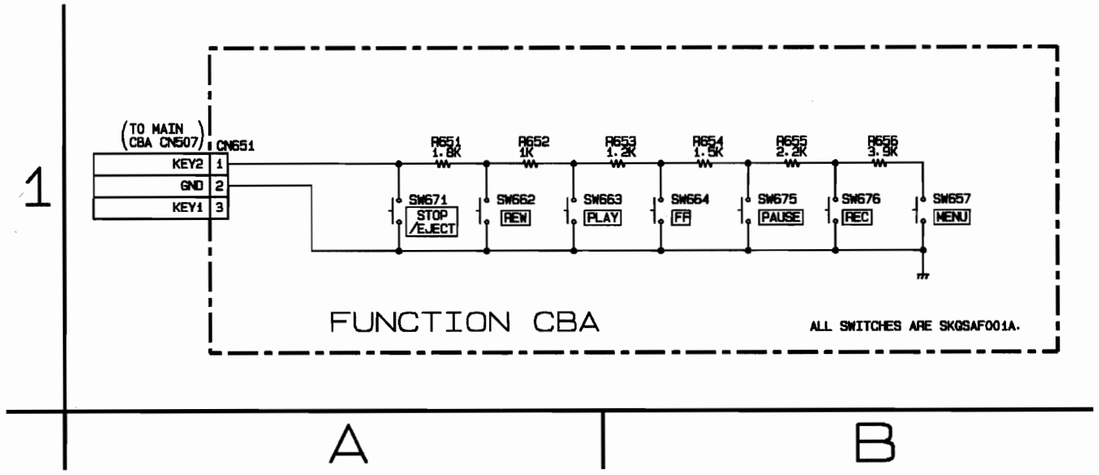
Ref.NO	TYPE A	TYPE B
IC451	LA72652M	LA72653M
C474	0.033	0.1/50V
C479	0.47/50V	4.7/25V
C480	0.1/50V	4.7/25V
C483	47/10V	22/16V
C485	47/6.3V	22/16V
C486	1/50V	4.7/25V
C488	0.47/50V	4.7/25V

Function Schematic Diagram (SL260B)



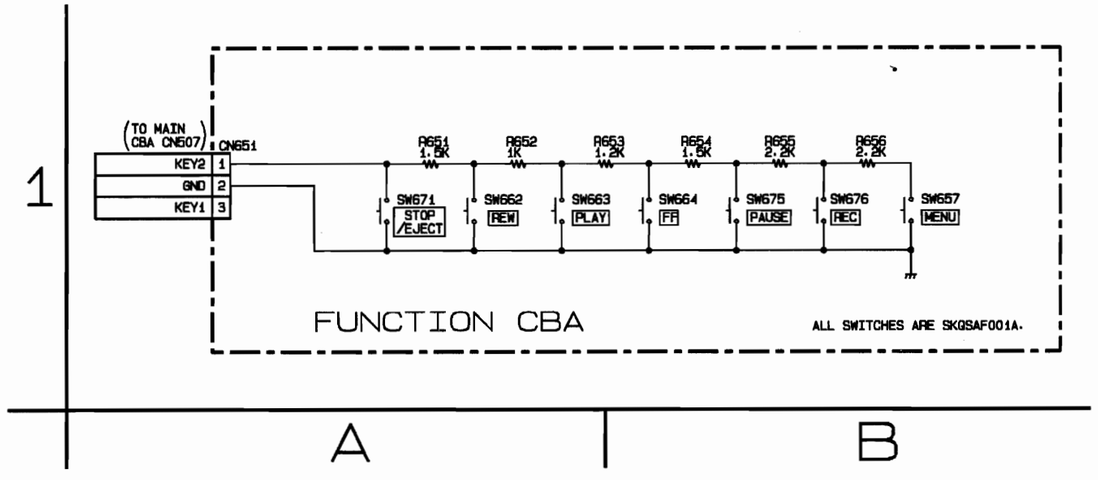
H7900SCF

Function Schematic Diagram (EWV601)



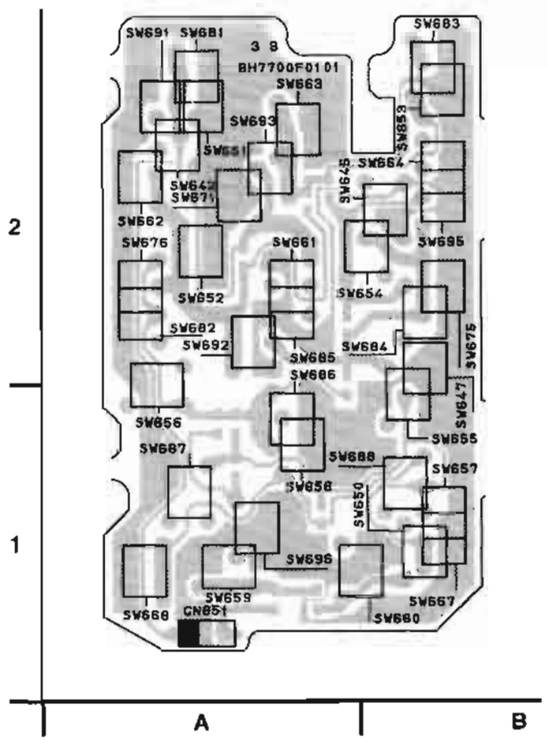
H7931SCF

Function Schematic Diagram (6260VB)

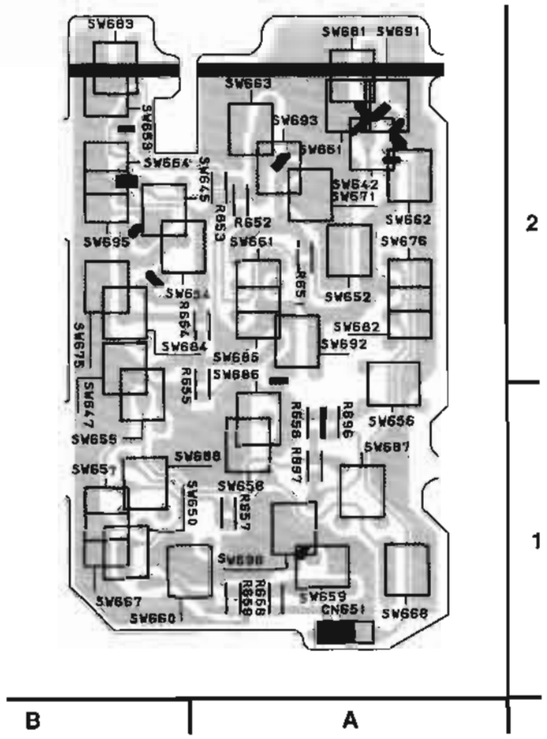


H7930SCF

Function CBA Top View

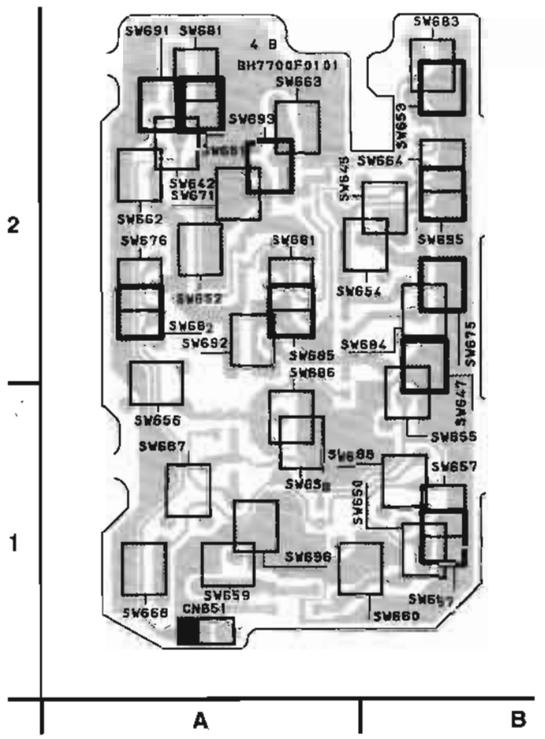


Function CBA Bottom View

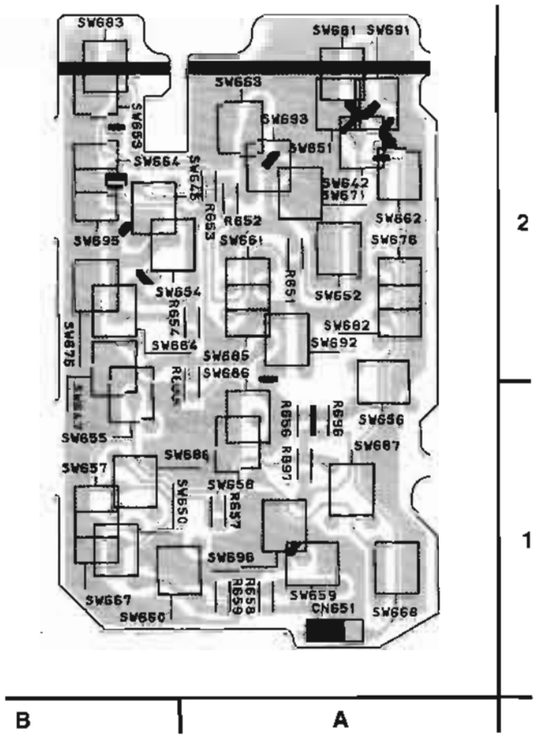


BH7700F01013-B

Function CBA Top View



Function CBA Bottom View



BH7700F01014-B

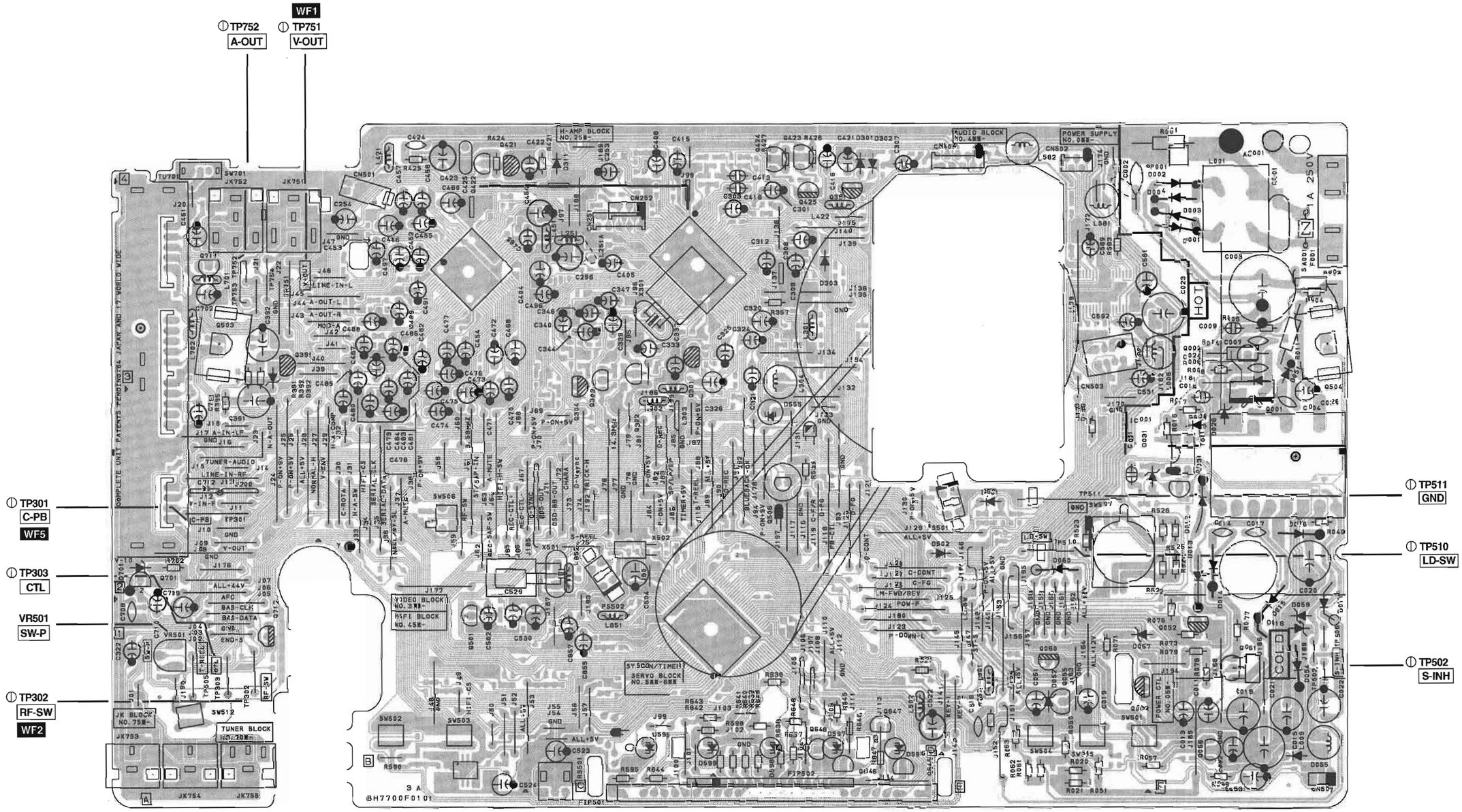
Main CBA Top View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole représente un fusible à fusion rapide."

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT , AN ISOLATION TRANSFORMER MUST BE USED. ALSO , IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY , WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT , A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



(5-2 F/R)

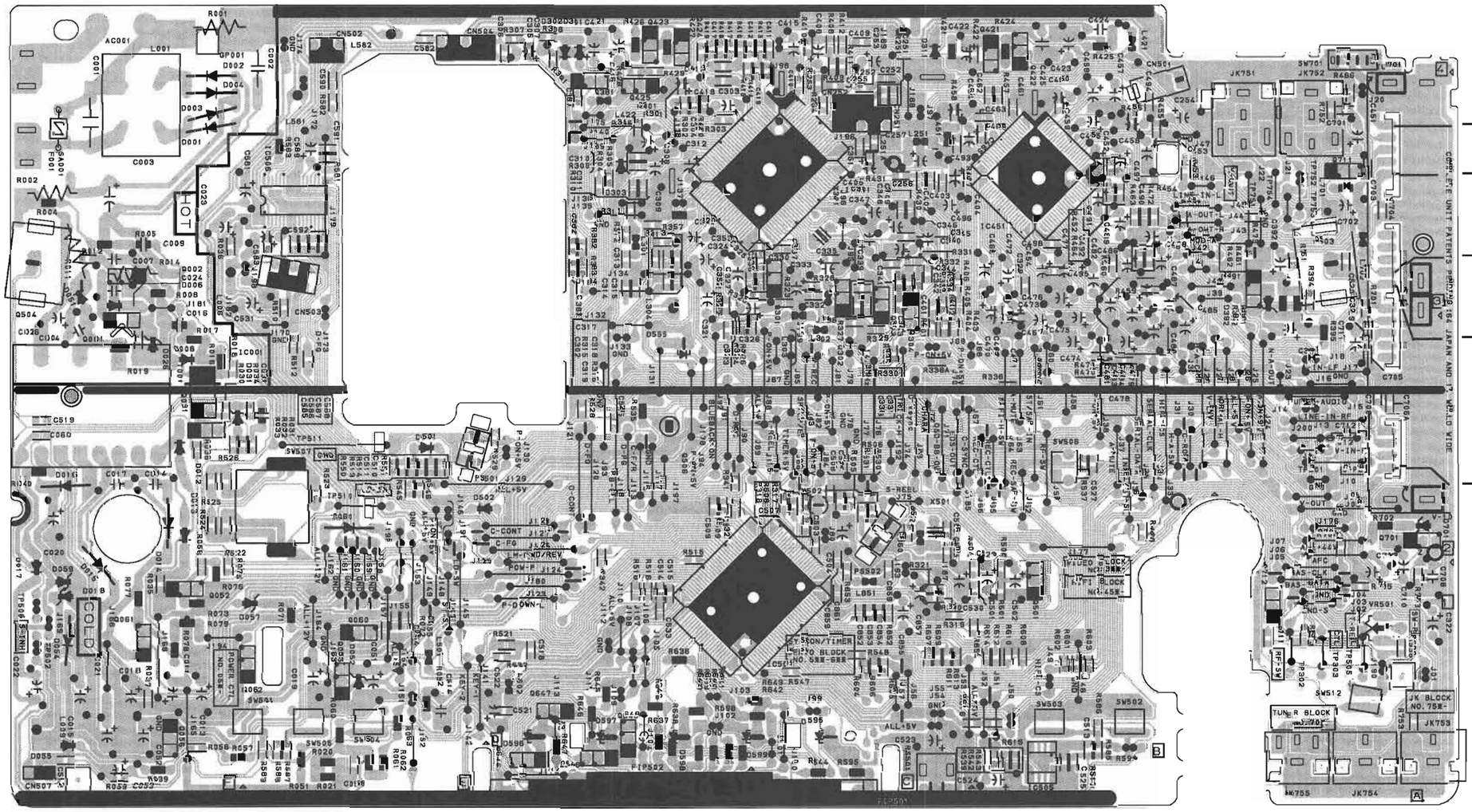
Main CBA Bottom View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES
D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole reprèsente un fusible à fusion rapide."

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT , AN ISOLATION TRANSFORMER MUST BE USED. ALSO , IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY , WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT , A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



Main CBA

Ref.NO	Position
ICS	
IC001	F-2
IC301	C-3
IC451	B-3
IC501	C-1
IC506	E-3
TRANSISTORS	
Q001	F-2
Q002	F-3
Q031	F-2
Q052	F-1
Q055	E-1
Q056	F-1
Q060	E-1
Q301	C-3
Q302	C-2
Q303	C-2
Q391	A-3
Q421	B-4
Q422	B-4
Q423	D-4
Q424	D-4
Q425	D-3
Q501	B-1
Q503	A-3
Q504	F-3
Q506	D-2
Q701	A-2
CONNECTORS	
CN251	C-3
CN501	B-4
CN502	E-4
CN503	E-3
CN504	E-4
VARIABLE RESISTORS	
VR501	A-1
TEST POINTS	
TP301	A-2
TP302	A-1
TP303	A-1
TP502	F-1
TP505	A-1
TP506	F-1
TP510	E-2
TP511	E-2
TP751	A-3
TP753	A-3
TP754	A-3

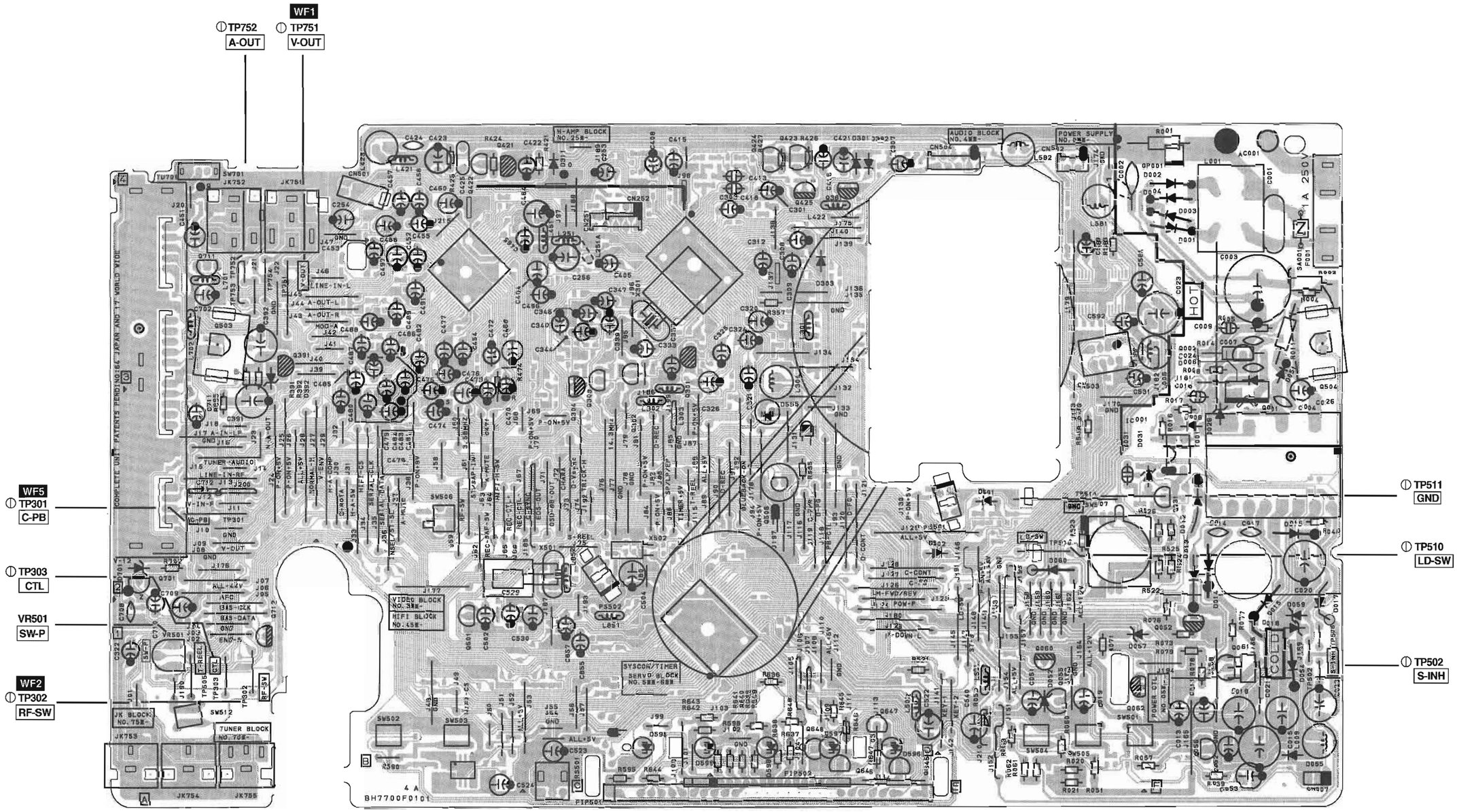
Main CBA Top View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD,
REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole représente un fusible à fusion rapide."

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT , AN ISOLATION TRANSFORMER MUST BE USED. ALSO , IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY , WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT , A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



5-3 F/R

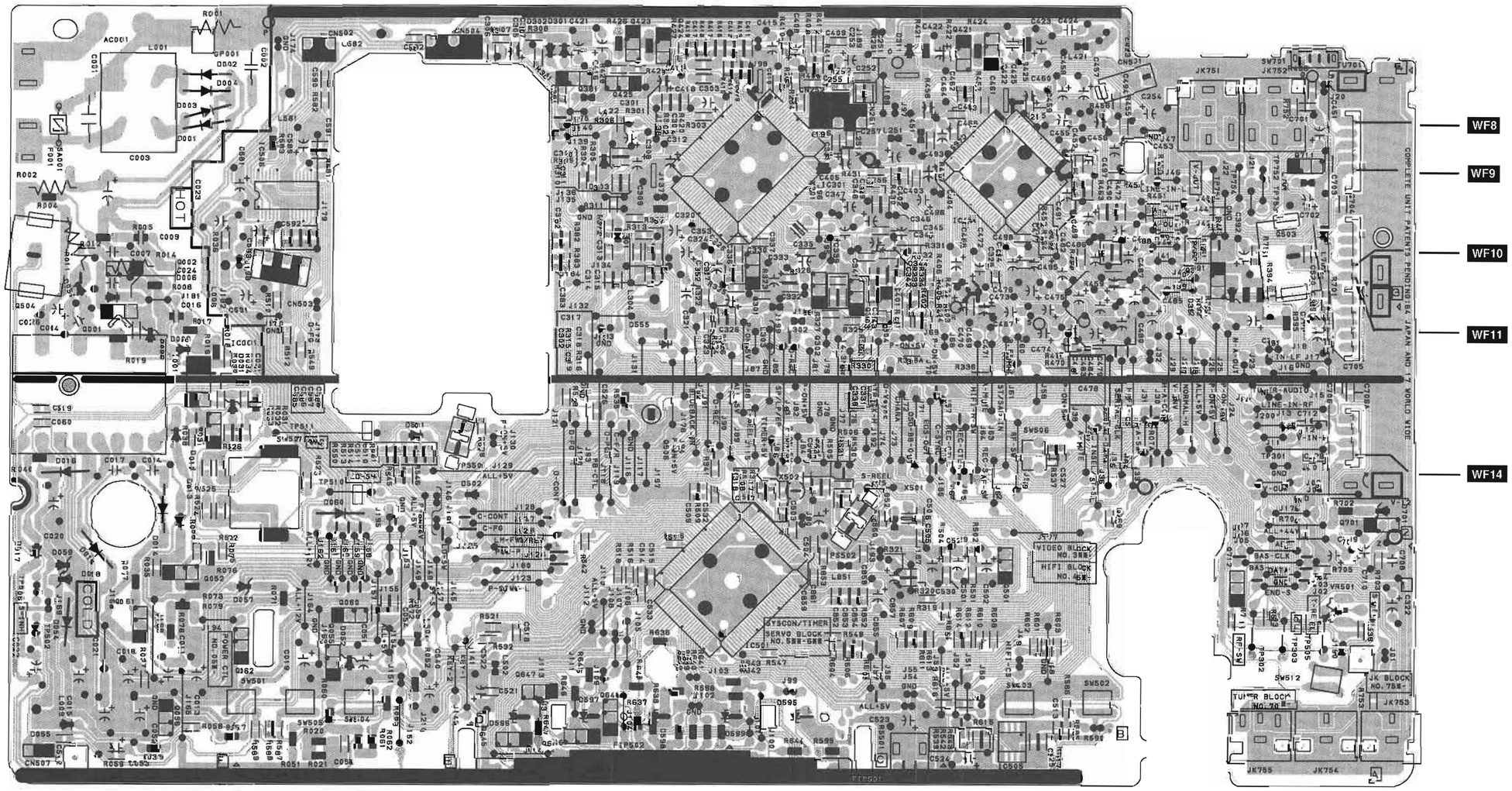
Main CBA Bottom View

CAUTION !
Fixed voltage power supply circuit is used in this unit.
If Main Fuse (F001) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

CAUTION
FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH THE SAME TYPE FUSE.
ATTENTION : POUR UNE PROTECTION CONTINUE LES RISQES D'INCELE N'UTILISER QUE DES FUSIBLE DE MEMO TYPE.
RISK OF FIRE-REPLACE FUSE AS MARKED.
"This symbol means fast operating fuse."
"Ce symbole représente un fusible à fusion rapide."

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT , AN ISOLATION TRANSFORMER MUST BE USED. ALSO , IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY , WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT , A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :
The voltage for parts in hot circuit is measured using hot GND as a common terminal.

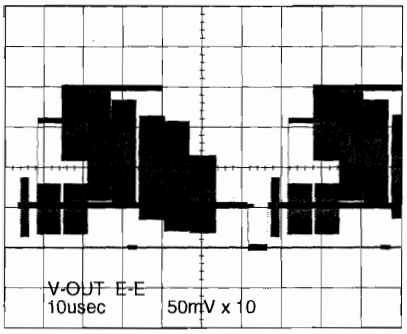


Main CBA

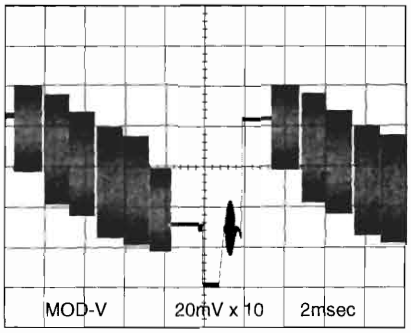
Ref.NO	Position
ICS	
IC001	F-2
IC301	C-3
IC451	B-3
IC501	C-1
IC506	E-3
TRANSISTORS	
Q001	F-2
Q002	F-3
Q031	F-2
Q052	F-1
Q055	E-1
Q056	F-1
Q060	E-1
Q301	C-3
Q302	C-2
Q303	C-2
Q391	A-3
Q421	B-4
Q422	B-4
Q423	D-4
Q424	D-4
Q425	D-3
Q501	B-1
Q503	A-3
Q504	F-3
Q506	D-2
Q701	A-2
CONNECTORS	
CN251	C-3
CN501	B-4
CN502	E-4
CN503	E-3
CN504	E-4
VARIABLE RESISTORS	
VR501	A-1
TEST POINTS	
TP301	A-2
TP302	A-1
TP303	A-1
TP502	F-1
TP505	A-1
TP506	F-1
TP510	E-2
TP511	E-2
TP751	A-3
TP753	A-3
TP754	A-3

WAVEFORMS

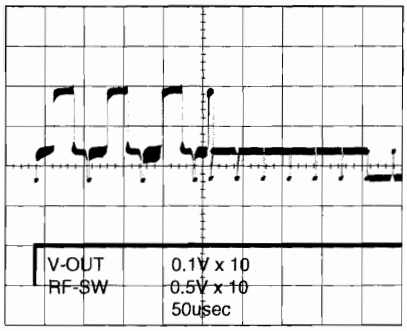
WF 1



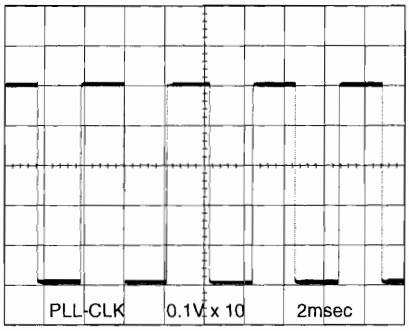
WF9



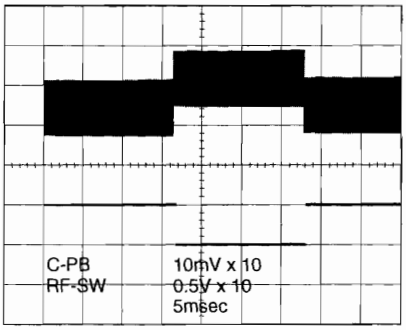
WF1 UPPER **WF2** LOWER



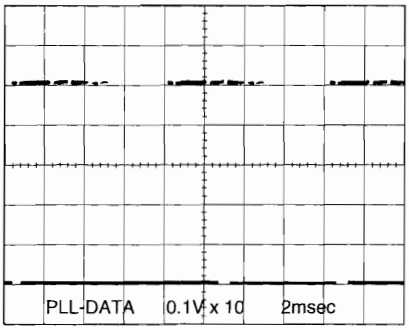
WF10



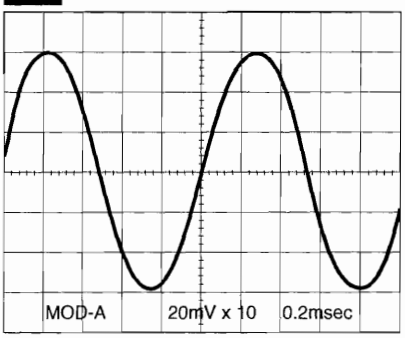
WF5



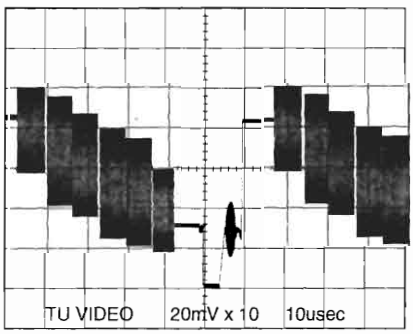
WF11



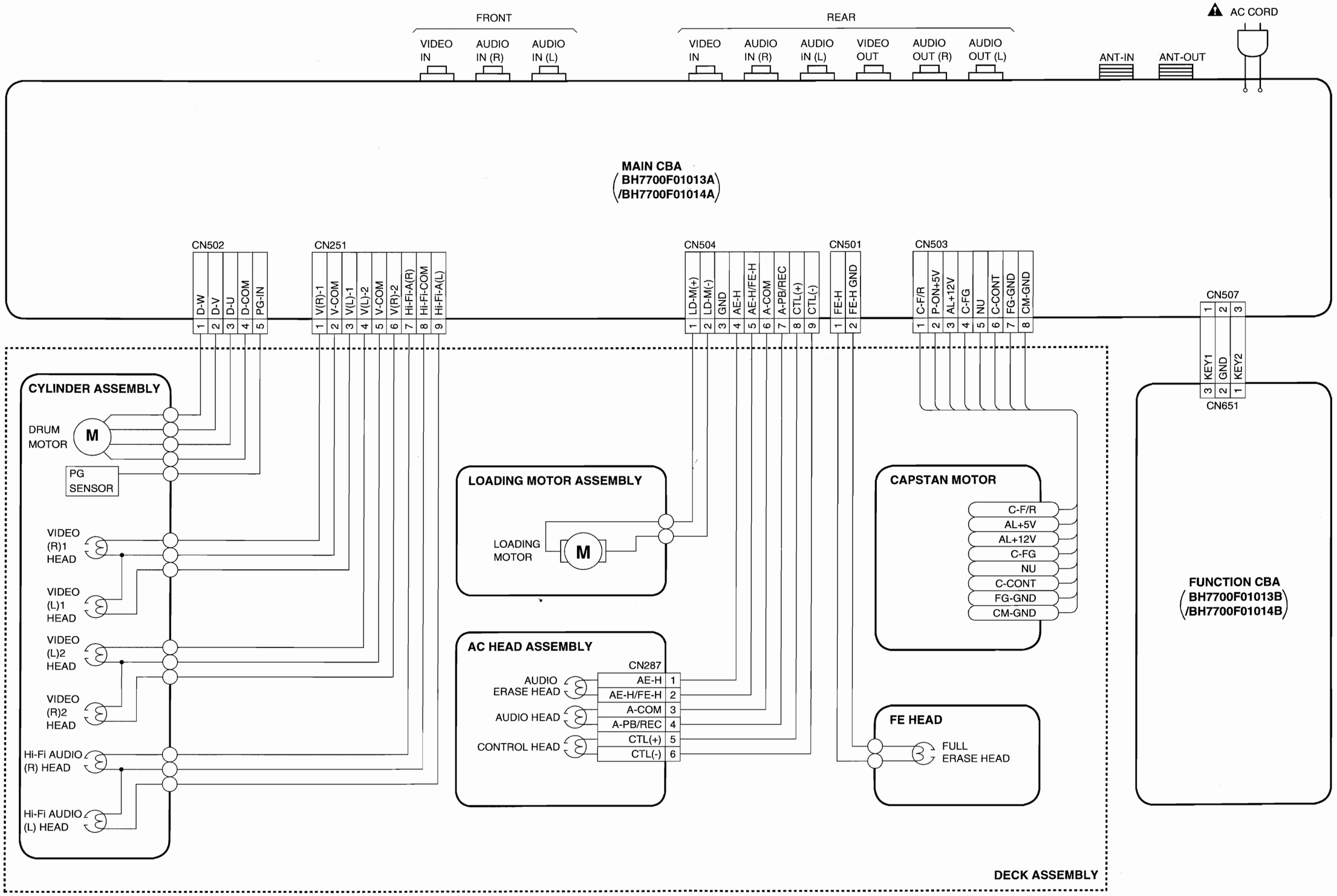
WF8



WF14



WIRING DIAGRAM



SYSTEM CONTROL TIMING CHARTS

Mode SW : LD-SW

LD-SW Position detection A/D Input voltage Limit (Calculated voltage)	Symbol
3.76V~4.50V (4.12V)	EJ
4.51V~5.00V (5.00V)	CL
0.00V~0.25V (0.00V)	SB
1.06V~1.50V (1.21V)	TL
0.66V~1.05V (0.91V)	FB
1.99V~2.60V (2.17V)	SF
1.51V~1.98V (1.80V)	AU
3.20V~3.75V (3.40V)	AL
0.26V~0.65V (0.44V)	SS
4.51V~5.00V (5.00V)	GC
2.61V~3.19V (2.97V)	RS

Note:

EJ ⟶ RS : Loading FWD (LM-FWD "H", LM-REV "L")

RS ⟶ EJ : Loading REV (LM-FWD "L", LM-REV "H")

Stop (A) = Loading

Stop (B) = Unloading

Note :

Symbol	Loading Status
EJ	Eject
CL	Eject ~ REW Reel
SB	REW Reel ~ Stop(B)
TL	Stop(B) ~ Brake Cancel
FB	Brake Cancel
SF	~ Stop(A)
AU	Stop(A) ~ Play / REC
AL	Play / REC ~ Still / Slow
SS	Still / Slow ~ Capstan Reversal
GC	Capstan Reversal ~ RS (REW Search)
RS	RS (REW Search)

Still/Slow Control
Frame Advance Timing Chart

1) SP Mode

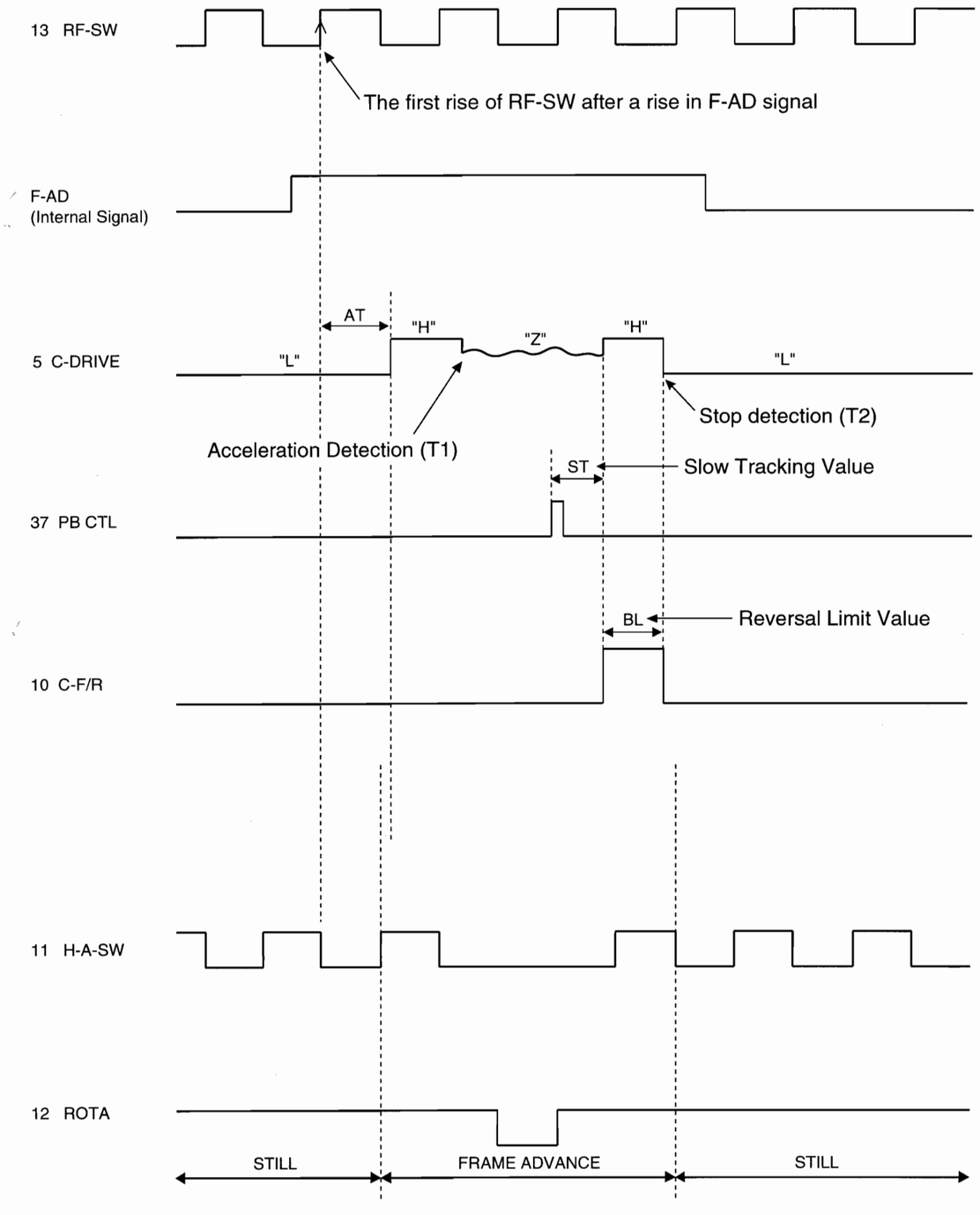


Fig.1

2) LP Mode

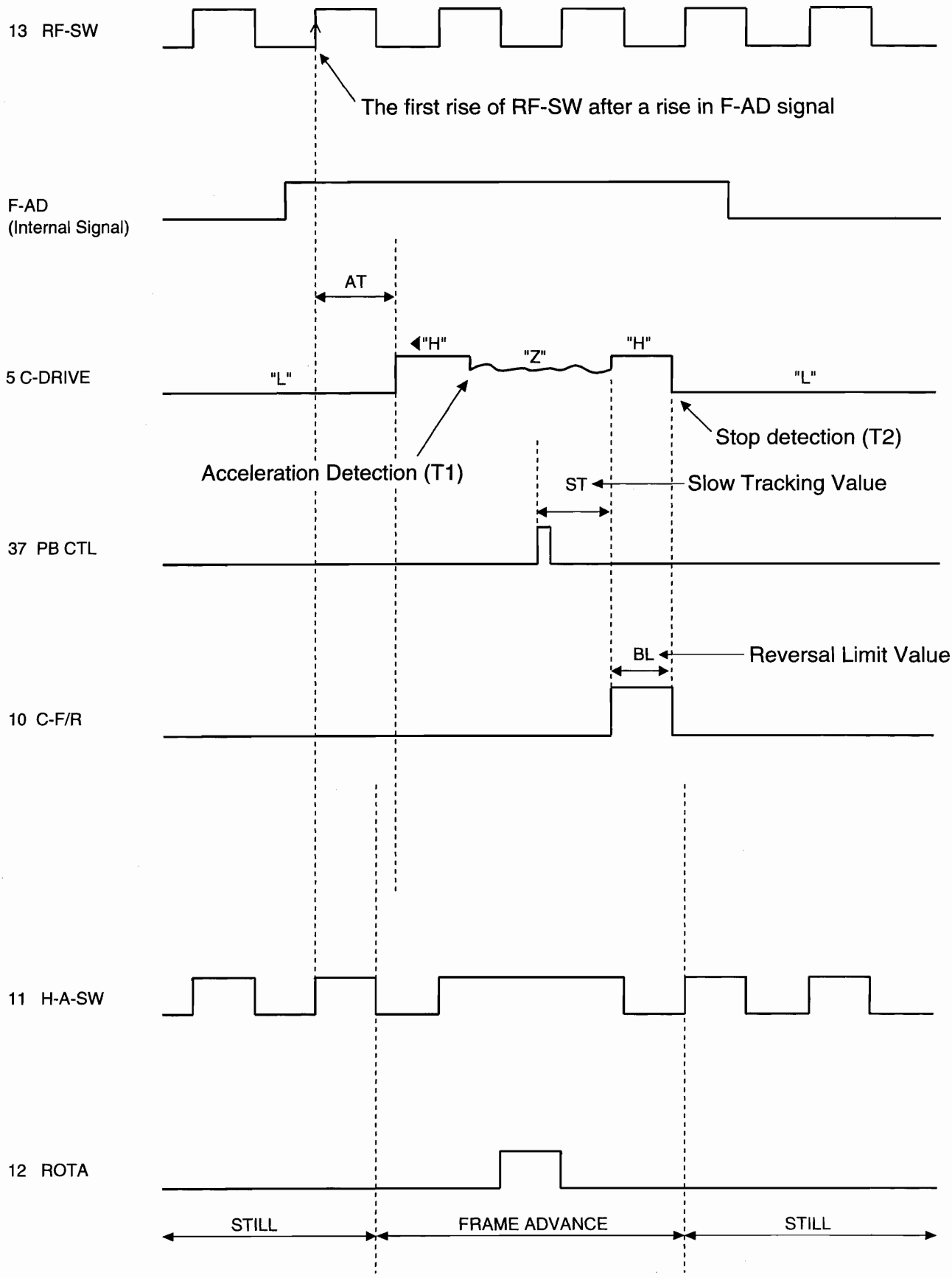


Fig.2

1. EJECT (POWER OFF) -> CASSETTE IN (POWER ON) -> STOP(B) -> STOP(A) -> PLAY -> RS -> FS -> PLAY -> STILL -> PLAY -> STOP(A)

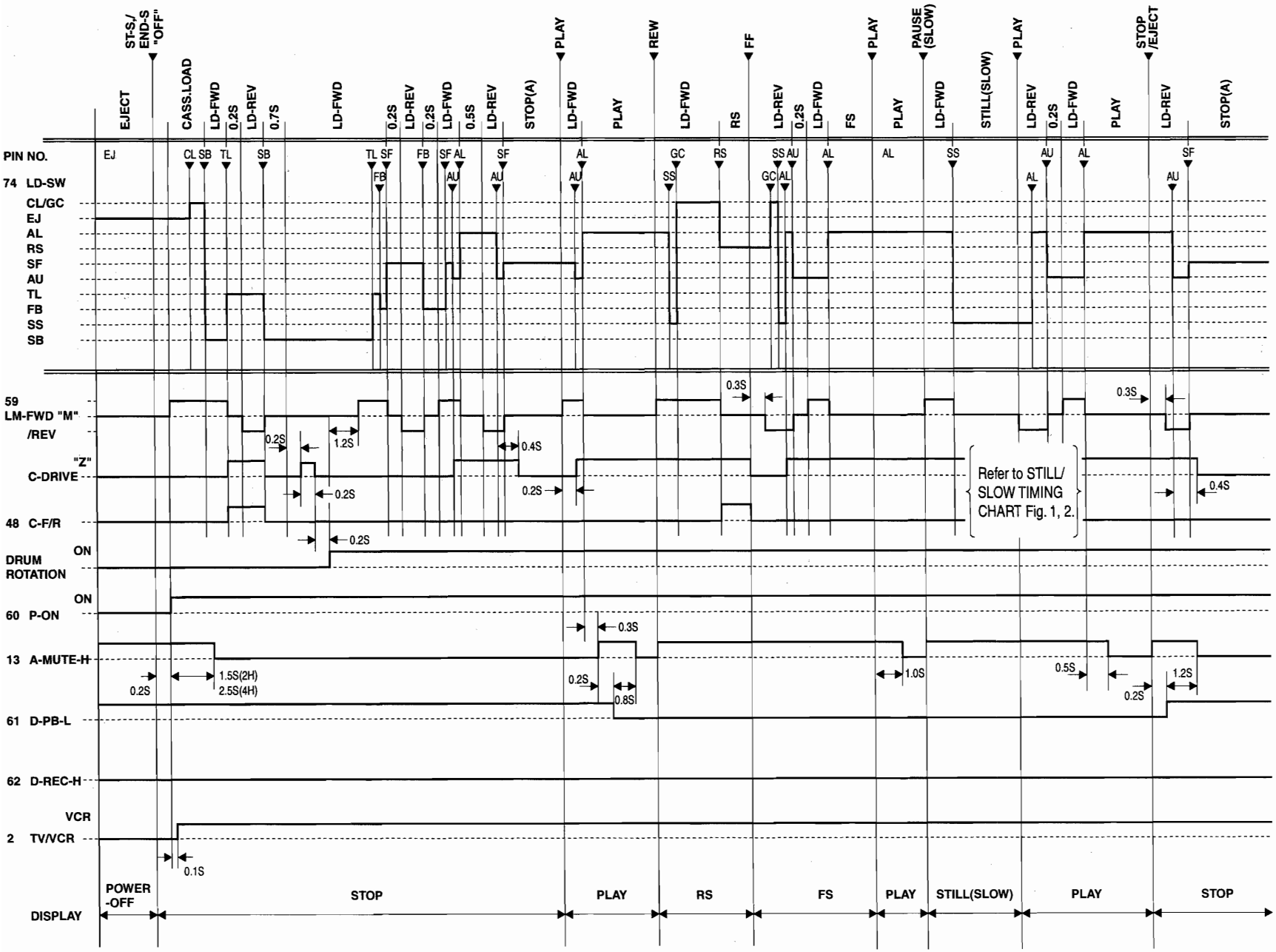


Fig.3

2. STOP(A) -> FF -> STOP(A) -> REW -> STOP(A) -> REC -> PAUSE -> PAUSE or REC -> STOP(A) -> EJECT

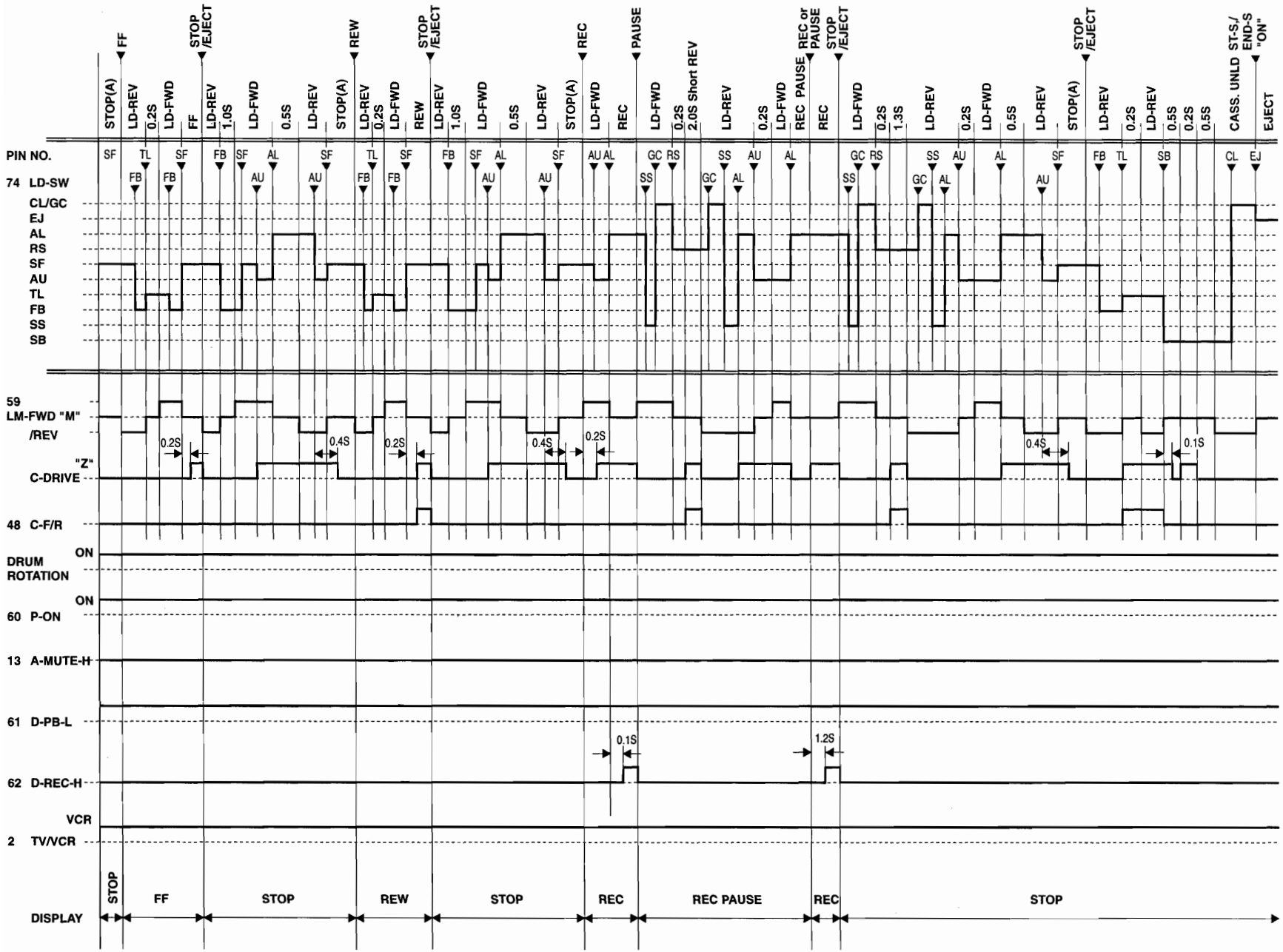


Fig.4

IC PIN FUNCTION

IC501 (SERVO / SYSTEM CONTROL IC)

"H" ≥ 4.5V, "L" ≤ 1.0V

Pins that have * in the Pin No. section on table below are not used.

Pin No.	IN/ OUT	Signal Name	Function	Active Level
1	IN	REMO CON-IN	Remote Control Sensor	L
2	OUT	TV/VCR	RF Conv. ON/OFF Signal (TV="L"/ VCR="H")	H/L
3	–	N.U.	Not Used	–
4	–	N.U.	Not Used	–
5	–	N.U.	Not Used	–
6	–	N.U.	Not Used	–
7	OUT	INSEL/ ST-SL	Input Selector Control Signal (EE/Rec)/ Still/Slow (Playback)	H/Hi-z /L
8	OUT	HiFi-CS	HiFi IC Chip Select	H
9	IN/ OUT	I^2C BUS-DATA	I^2C BUS Data Input/Output	H/L
10	OUT	I^2C BUS-CLK	I^2C BUS Clock Output	H/L
11	OUT	HiFi-CLK	HiFi IC Control Clock Output	H/L
12	OUT	HiFi-DATA	HiFi IC Control Data Output	H/L
13	OUT	A-MUTE	Audio Mute Control Signal (Mute="H")	H
14	IN	H-A-COMP	Head Amp Comparator Signal	H/L
15	OUT	C-ROTA	Color Phase Rotary Changeover Signal	H/L
16	OUT	H-A-SW	Video Head Amp Switching Pulse	H/L
17	OUT	RF-SW	Video Head Switching Pulse	H/L
18	OUT	HiFi-H-SW	HiFi Audio Head Switching Pulse	H/L
19	OUT	REC-CTL (+)	Record Control Signal (+)	H/L
20	OUT	REC-CTL (-)	Record Control Signal (-)	H/L
21	IN	C-SYNC	Composite Synchronized Pulse	PULSE
22	–	GND	GND	–
23	–	N.U.	Not Used	–
24	–	OSDVss	OSDVss	–
25	IN	REC-SAF-SW	Recording Safety SW Detect (With Record tab="L"/ With out Record tab="H")	H/L
*26	IN	C-VIDEO-IN	Composite Video Signal Input (Slicer)	–
*27	IN	VHOLD	Condenser Connected Terminal (Slicer)	–
28	–	HLF	LPF Connected Terminal (Slicer)	–
29	–	GND	GND	–
30	OUT	OSD-BB-OUT	Composite Video Signal Output (Blue Back)	–
31	OUT	OSD-CHARA-OUT	Character Output (Superimposed)	–
32	–	OSDVcc	OSDVcc	–
33	OUT	D-V SYNC-OUT	Dummy V-sync Output	H/Hi-z
34	IN	RESET	System Reset Signal (Reset= "L")	L
35	IN	OSCIN	Clock Input for letter size	–
36	OUT	OSCOUT	Clock Output for letter size	–
37	–	Vcc	Vcc	–
38	IN	XIN	Main Clock Input 14.31818 MHz	–
39	OUT	Xout	Main Clock Output	–
40	–	Vss	Vss(GND)	–
41	IN	XC IN	Sub Clock 32 kHz	–
42	OUT	XC OUT	Sub Clock 32 kHz	–
43	IN	CLKSEL	Clock Select (GND)	L
*44	OUT	PICTURE-SEL	Picture Control Signal	–
45	OUT	SP/LP /SLP	Tape Speed Select Signal (SP="L"/ LP="Z"/SLP="H")	H/Z/L
46	–	N.U.	Not Used	–
47	OUT	TRICK/ C-G/APC	Special Playback /Copy Guard/APC Control Signal	H/Z/L

Pin No.	IN/ OUT	Signal Name	Function	Active Level
48	OUT	C-F/R	Capstan Motor FWD/REV Control Signal (FWD="L"/ REV="H")	H/L
49	IN	T-REEL	Take Up Reel Rotation Signal	PULSE
50	–	N.U.	Not Used	–
51	IN	C-FG	Capstan Motor Rotation Detection Pulse	PULSE
52	IN	D-FG	Drum Motor Rotation Detection Pulse	PULSE
53	IN	D-PG	Drum Motor Pulse Generator	PULSE
54	IN	PB-CTL	Playback Control Signal	PULSE
55	OUT	C-CONT	Capstan Motor Control Signal	PWM
56	OUT	D-CONT	Drum Motor Control Signal	PWM
57	–	N.U.	Not Used	–
58	–	N.U.	Not Used	–
59	OUT	LM-FWD/ REV	Loading Motor FWD/REV Output	H/Z/L
60	OUT	P-ON-L	Power On Signal to Low	L
61	OUT	D-PB	Playback Instruction Signal (Playback="L")	L
62	OUT	D-REC	Delayed Record Signal	H
63	IN	P-DOWN -L	Power Voltage Down Detector Signal	L
64	–	N.U.	Not Used	–
65	IN	HiFi/NOR -IN	Audio Mode Input HiFi="L"/Normal="H"	H/L
66	OUT	BLUE BACK-ON	Blueback Control Signal	H
67	IN	ST/SAP-IN	Tuner Stereo/Sap Detector Signal Input	A/D
68	IN	END-S	Tape End Position Detect Signal	A/D
69	IN	AFC	Automatic Frequency Control Signal	A/D
70	IN	V-ENV	Video Envelope Comparator Signal	A/D

Pin No.	IN/ OUT	Signal Name	Function	Active Level
71	IN	PG-DELAY	Video Head Switching Pulse Signal Adjusted Voltage	A/D
72	IN	KEY-1	A/D Key Data Signal	A/D
73	IN	KEY-2	A/D Key Data Signal	A/D
74	IN	LD-SW	Deck Mode Position Detect Signal	A/D
75	IN	ST-S	Tape Start Position Detect Signal	A/D
76	–	AVcc	A/D Converter Power Input/ Standard Voltage Input	–
77	–	FLDVcc	FLDVcc	–
78	–	FLDVp	GND	–
79	OUT	REC LED	REC Mode LED Indicator	H/L
80	OUT	TIMER LED	TIMER Mode LED Indicator	H/L
81	–	N.U.	Not Used	–
82	–	N.U.	Not Used	–
83	OUT	REC LED	REC Mode LED Indicator	H/L
84	OUT	TIMER LED	TIMER Mode LED Indicator	H/L
85	–	N.U.	Not Used	–
86	–	N.U.	Not Used	–
87	–	N.U.	Not Used	–
88	OUT	TAPE IN LED	Tape IN/OUT LED Indicate	H/L
89	–	N.U.	Not Used	–
90	–	N.U.	Not Used	–
91	–	N.U.	Not Used	–
92	OUT	TAPE IN LED	Tape IN/OUT LED Indicate	H/L
93	OUT	VCR/TV LED	VCR/TV Mode LED Indicate	H/L
94	OUT	VCR/TV LED	VCR/TV Mode LED Indicate	H/L
95	–	N.U.	Not Used	–
96	–	N.U.	Not Used	–
97	–	N.U.	Not Used	–
98	–	N.U.	Not Used	–
99	–	N.U.	Not Used	–
100	–	N.U.	Not Used	–

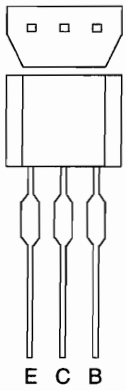
Notes:

Abbreviation for Active Level:

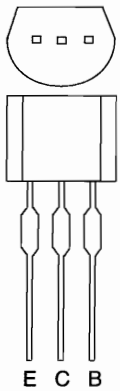
PWM ---------- Pulse Wide Modulation

A/D ---------- Analog - Digital Converter

LEAD IDENTIFICATIONS

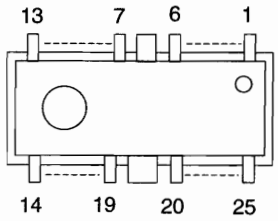


BN1F4M-T
BA1F4M-T
KTA1266(GR)
KTC3193(Y)
KTC3199(Y,GR,BL)
2SC2785(J.H.F.K)
2SC2058(Q)
KRA103M
KRC103M
DTC124ESA
2SA1015-GR(TPE2)
DTA124ESA

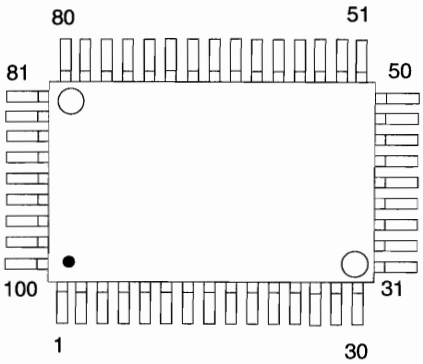


2SC1815-Y(TPE2)
2SC1815-GR(TPE2)
2SC3331(T,U)
2SC2120-Y(TPE2)
KTC3203(Y)

BD6655FP



LA71091M
LA71090M
QSZAA0RMB018



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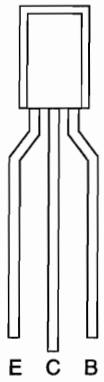
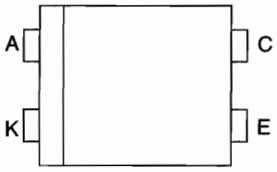
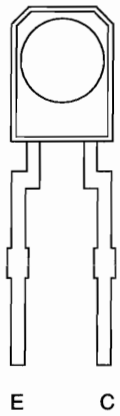


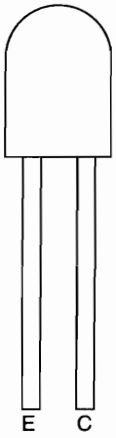
LTV-817(B.C)-F
PC-17T1



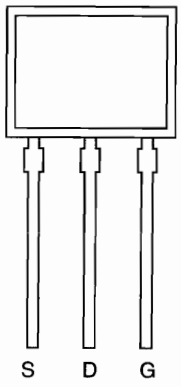
ST-304L-(A,B,C,D)



PT204-6B-12



2SK3472
2SK2599



Note:
A: Anode
K: Cathode
E: Emitter
C: Collector
B: Base
R: Reference
S: Source
G: Gate
D: Drain

DECK MECHANISM SECTION

VIDEO CASSETTE RECORDER

SL260B/6260VB/EWV601

Sec. 2: Deck Mechanism Section

- **Standard Maintenance**
- **Alignment for Mechanism**
- **Disassembly/Assembly of Mechanism**
- **Alignment Procedures of Mechanism**

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Standard Maintenance 2-1-1
Service Fixtures and Tools 2-2-1
Mechanical Alignment Procedures 2-3-1
Disassembly / Assembly Procedures of Deck Mechanism 2-4-1
Alignment Procedures of Mechanism 2-4-9

STANDARD MAINTENANCE

Service Schedule of Components

H: Hours ○: Check ●: Change

Deck		Periodic Service Schedule			
Ref. No.	Part Name	1,000 H	2,000 H	3,000 H	4,000 H
B2	Cylinder Assembly	○	●	○	●
B3	Loading Motor Assembly			●	
B8	Pulley Assembly		●		●
B27	Tension Lever Sub Assembly		●		●
B31	AC Head Assembly			●	
B573, B574	Reel (S), Reel (T)			●	
B37	Capstan Motor		●		●
B52	Cap Belt		●		●
*B73	FE Head			●	
B133	Idler Assembly		●		●
B410	Pinch Arm (A) Assembly		●		●
B414	M Brake S Assembly		●		●
B416	M Brake T Assembly		●		●
B525	LDG Belt		●		●

Notes:

1. Clean all parts for the tape transport (Upper Drum with Video Head / Pinch Roller / Audio Control Head / Full Erase Head) using 90% Isopropyl Alcohol.
2. After cleaning the parts, do all DECK ADJUSTMENTS.
3. For the reference numbers listed above, refer to Deck Exploded Views.

   * B73 ------ VCR Model only

Cleaning

Cleaning of Video Head

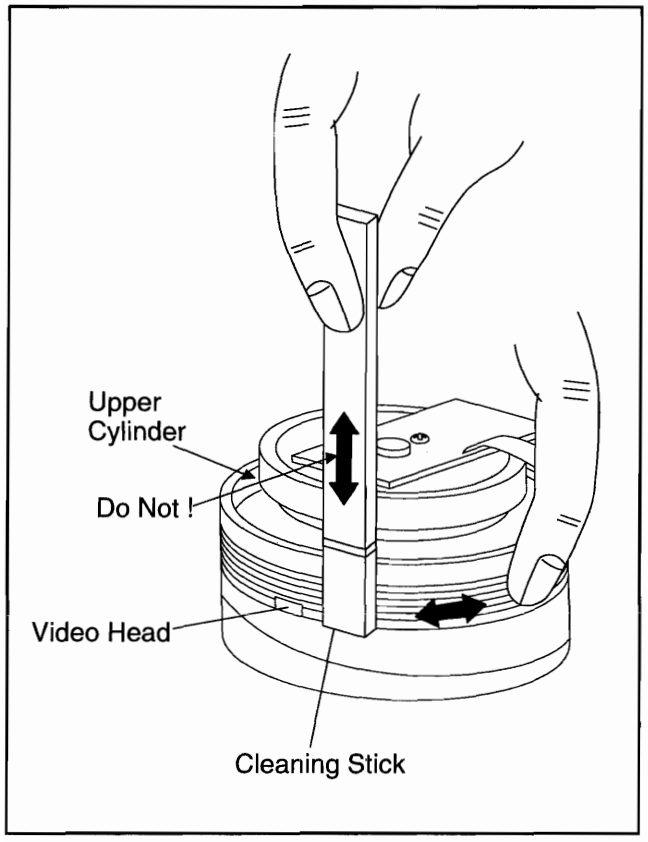
Clean the head with a head cleaning stick or chamois cloth.

Procedure

1. Remove the top cabinet.
2. Put on a glove (thin type) to avoid touching the upper and lower drum with your bare hand.
3. Put a few drops of 90% Isopropyl alcohol on the head cleaning stick or on the chamois cloth and, by slightly pressing it against the head tip, turn the upper drum to the right and to the left.

Notes:

1. The video head surface is made of very hard material, but since it is very thin, avoid cleaning it vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit.
3. Do not reuse a stained head cleaning stick or a stained chamois cloth.



Cleaning of Audio Control Head

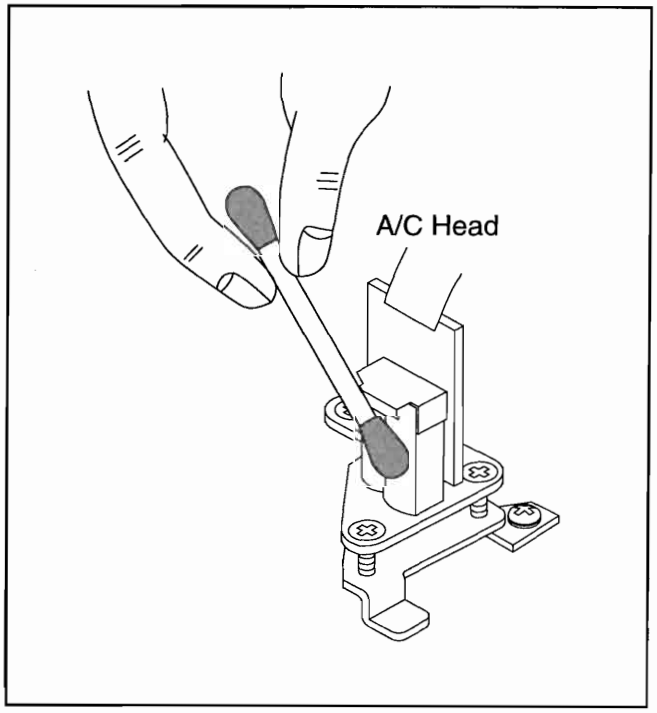
Clean the head with a cotton swab.

Procedure

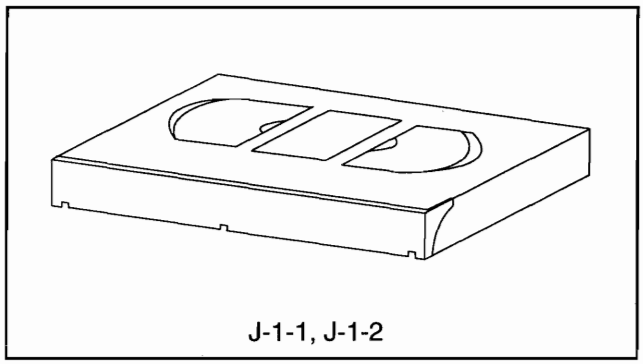
1. Remove the top cabinet.
2. Dip the cotton swab in 90% isopropyl alcohol and clean the audio control head. Be careful not to damage the upper drum and other tape running parts.

Notes:

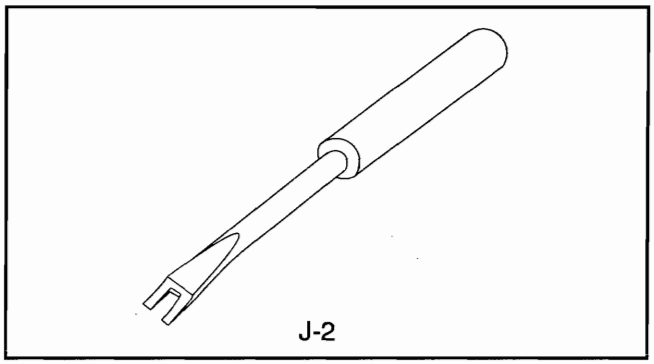
1. Avoid cleaning the audio control head vertically.
2. Wait for the cleaned part to dry thoroughly before operating the unit or damage may occur.



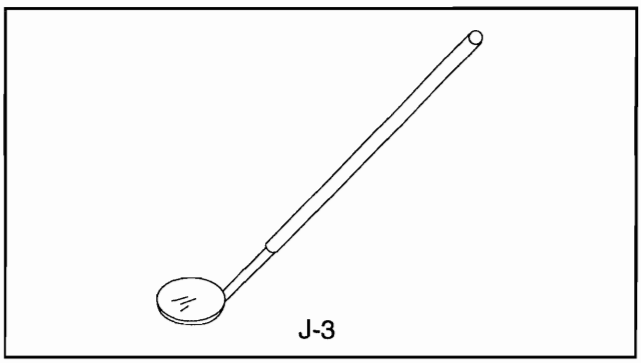
SERVICE FIXTURE AND TOOLS



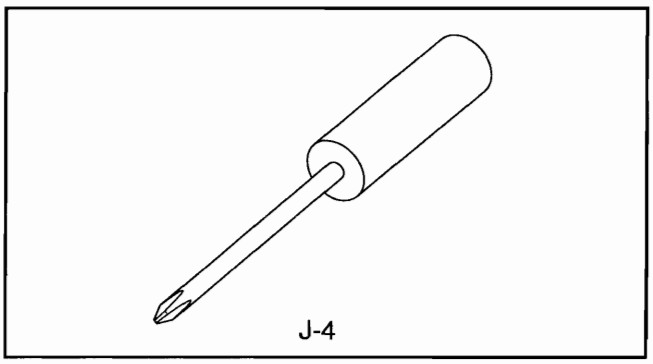
J-1-1, J-1-2



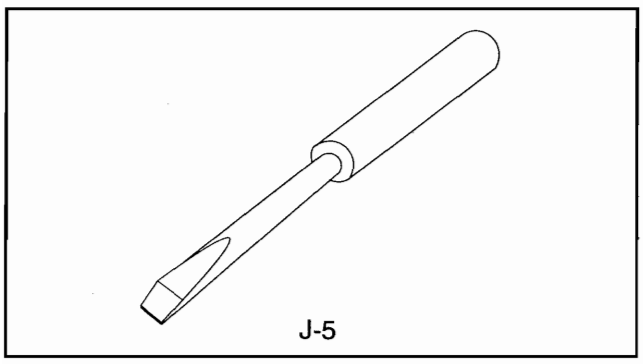
J-2



J-3



J-4



J-5

Ref. No.	Name	Part No.	Adjustment
J-1-1	Alignment Tape	FL8A	Head Adjustment of Audio Control Head
J-1-2	Alignment Tape	FL8N (2Head only) FL8NW (4Head only)	Azimuth and X Value Adjustment of Audio Control Head / Adjustment of Envelope Waveform
J-2	Guide Roller Adj.Screwdriver	FSJ-0006	Guide Roller
J-3	Mirror	FSJ-0004	Tape Transportation Check
J-4	Azimuth Adj.Screwdriver +	Available Locally	A/C Head Height
J-5	X Value Adj.Screwdriver -	Available Locally	X Value

Note:
Before starting any adjustment, take the Deck Assembly out of the cabinet and use J-6 to connect the Deck Assembly with the Main CBA.

MECHANICAL ALIGNMENT PROCEDURES

Explanation of alignment for the tape to correctly run starts on the next page. Refer to the information below on this page if a tape gets stuck, for example, in the mechanism due to some electrical trouble of the unit.

Service Information

A. Method for Manual Tape Loading/Unloading

To load a cassette tape manually:

1. Disconnect the AC plug.
2. Remove the Top Case and Front Assembly.
3. Insert a cassette tape. Though the tape will not be automatically loaded, make sure that the cassette tape is all the way in at the inlet of the Cassette Holder. To confirm this, lightly push the cassette tape further in and see if the tape comes back out, by a spring motion, just as much as you have pushed in.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 for a minute or two to complete this task.

To unload a cassette tape manually:

1. Disconnect the AC plug.
2. Remove the Top Cose and Front Assembly.
3. Make sure that the Moving guide preparations are in the Eject Position.
4. Turn the LDG Belt in the appropriate direction shown in Fig. M1 until the Moving guide preparations come to the Eject Position. Stop turning when the preparations begin clicking or can not be moved further. However, the tape will be left wound around the cylinder.
5. Turn the LDG Belt in the appropriate direction continuously, and the cassette tape will be ejected. Allow a minute or two to complete this task.

B. Method to place the Cassette Holder in the tape-loaded position without a cassette tape

1. Disconnect the AC Plug.
2. Remove the Top Case and Front Assembly.
3. Turn the LDG Belt in the appropriate direction shown in Fig. M1. Release the locking tabs shown in Fig. M1 and continue turning the LDG Belt until the Cassette Holder comes to the tape-loaded position. Allow a minute or two to complete this task.

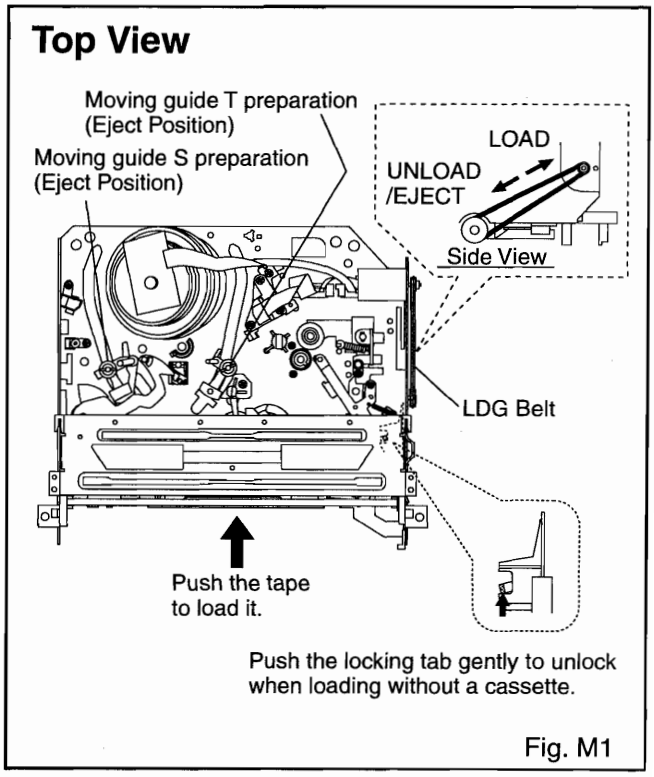


Fig. M1

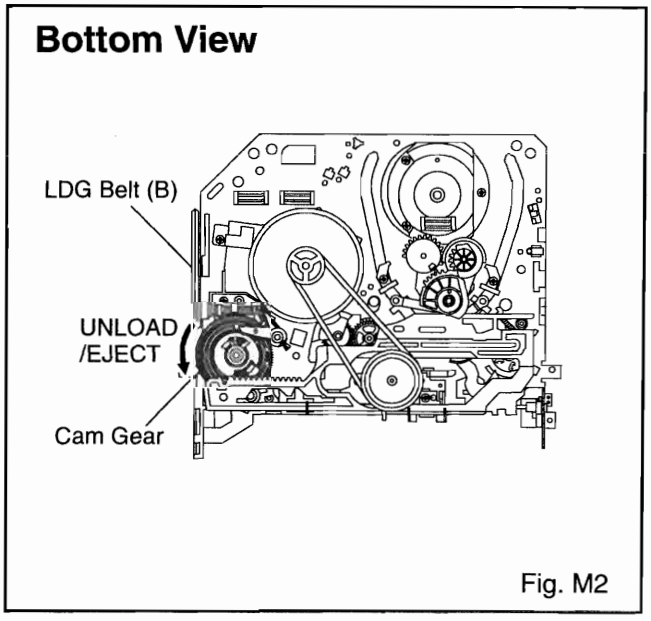


Fig. M2

1. Tape Interchangeability Alignment

Note:

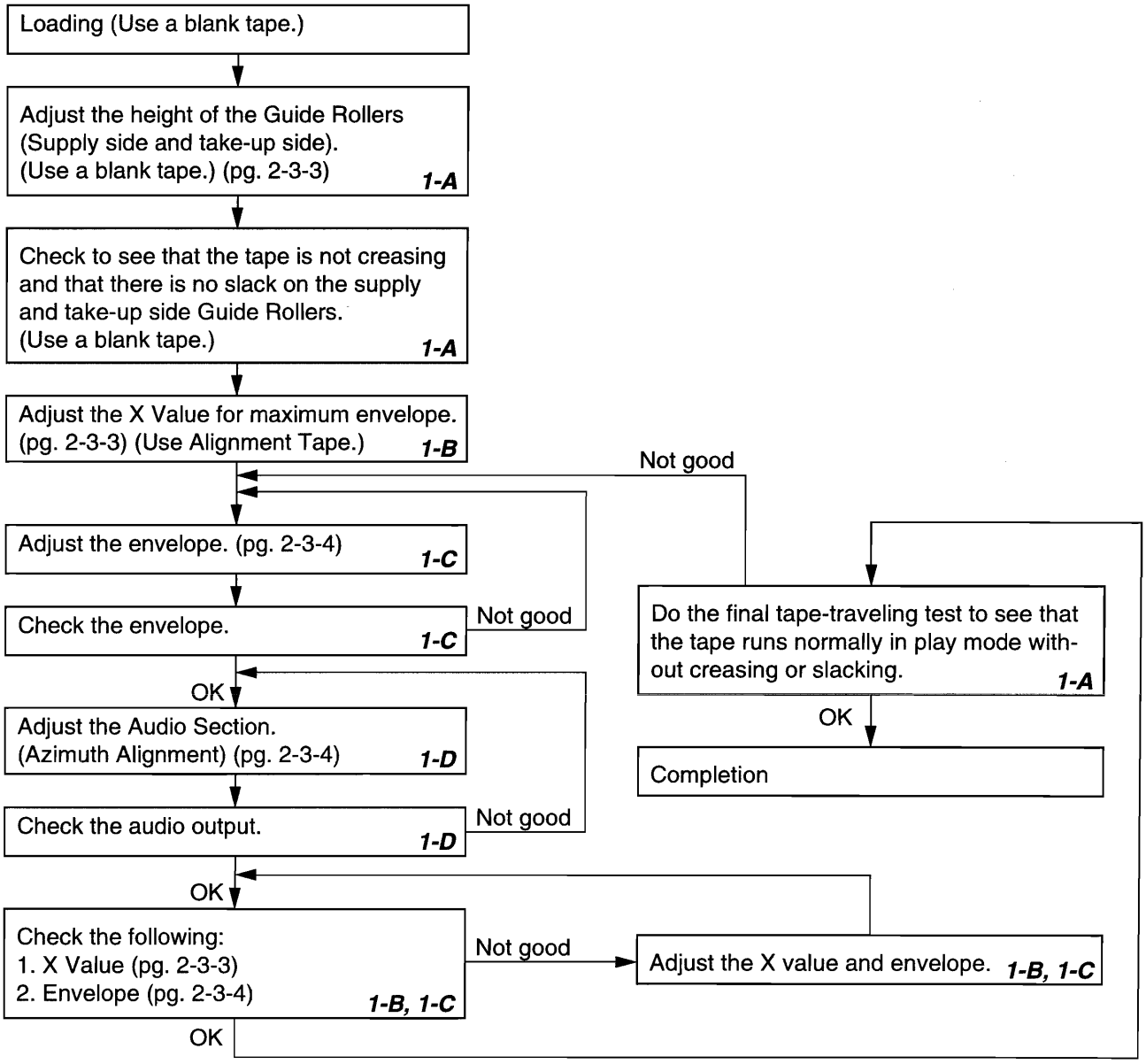
To do these alignment procedures, make sure that the Tracking Control Circuit is set to the center position every time a tape is loaded or unloaded. (Refer to page 2-3-4, procedure 1-C, step 2.)

Equipment required:

Dual Trace Oscilloscope
VHS Alignment Tape (FL8NW)
Guide Roller Adj. Screwdriver
X-Value Adj. Screwdriver

Note: Before starting this Mechanical Alignment, do all Electrical Adjustment procedures.

Flowchart of Alignment for tape traveling


Loading (Use a blank tape.)
Adjust the height of the Guide Rollers (Supply side and take-up side). (Use a blank tape.) (pg. 2-3-3) 1-A
Check to see that the tape is not creasing and that there is no slack on the supply and take-up side Guide Rollers. (Use a blank tape.) 1-A
Adjust the X Value for maximum envelope. (pg. 2-3-3) (Use Alignment Tape.) 1-B
Not good
Adjust the envelope. (pg. 2-3-4) 1-C
Check the envelope. 1-C
Not good
OK
Adjust the Audio Section. (Azimuth Alignment) (pg. 2-3-4) 1-D
Check the audio output. 1-D
Not good
OK
Check the following:
1. X Value (pg. 2-3-3)
2. Envelope (pg. 2-3-4) 1-B, 1-C
Not good
Adjust the X value and envelope. 1-B, 1-C
OK
Do the final tape-traveling test to see that the tape runs normally in play mode without creasing or slacking. 1-A
OK
Completion

1-A. Preliminary/Final Checking and Alignment of Tape Path

Purpose:

To make sure that the tape path is well stabilized.

Symptom of Misalignment:

If the tape path is unstable, the tape will be damaged.

Note: Do not use an Alignment Tape for this procedure. If the unit is not correctly aligned, the tape may be damaged.

1. Play back a blank cassette tape and check to see that the tape runs without creasing at Guide Rollers [2] and [3], and at points A and B on the lead surface. (Refer to Fig M3 and M4.)
2. If creasing is apparent, align the height of the guide rollers by turning the top of Guide Rollers [2] and [3] with a Guide Roller Adj. Screwdriver. (Refer to Fig. M3 and M5.)
   Note: Beneath each Guide Roller, there is a small screw. (Refer to Fig. M5.) This screw works to apply adequate torque to the shaft of each Guide Roller so that the Guide Roller turns properly. Even when adjusting the height of the Guide Roller(s), do not touch these two small screws.
3. Check to see that the tape runs without creasing at Take-up Guide Post [4] or without snaking between Guide Roller [3] and AC Head. (Fig. M3 and M5)
4. If creasing or snaking is apparent, adjust the Tilt Adj. Screw of the AC Head. (Fig. M6)

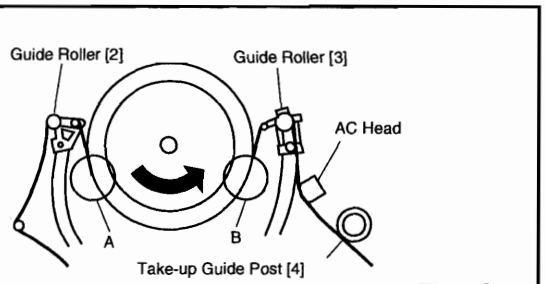


Fig. M3

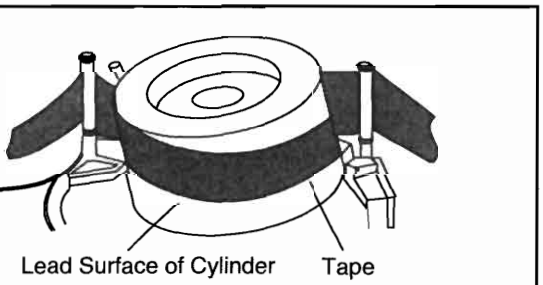


Fig. M4

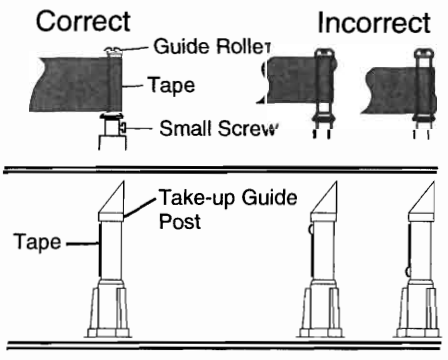


Fig. M5

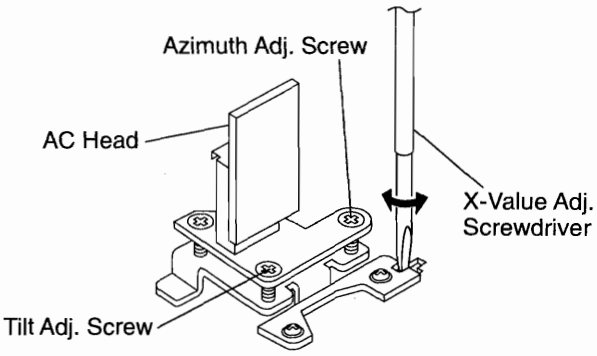


Fig. M6

1-B. X Value Alignment

Purpose:

To align the Horizontal Position of the Audio/Control/Erase Head.

Symptom of Misalignment:

If the Horizontal Position of the Audio/Control/Erase Head is not properly aligned, maximum envelope cannot be obtained at the Neutral position of the Tracking Control Circuit.

1. Connect the oscilloscope to TP301 (C-PB) and TP303 (CTL) on the Main CBA. Use TP302 (RF-SW) as a trigger.
2. Play back the Gray Scale of the Alignment Tape (FL8NW) and confirm that the PB FM signal is present.
3. Set the Tracking Control Circuit to the center position by pressing the CH UP button then the PLAY button on the VCR. (Refer to note on bottom of page 2-3-4.)
4. Use the X-Value Adj. Screwdriver so that the PB FM signal at TP301 (C-PB) is maximum. (Fig. M6)
5. Press CH UP button on the VCR until the CTL waveform has shifted by approx. +2msec. Make sure that the envelope is simply attenuated (shrinks in height) during this process so that you will know the envelope has been at its peak.

6. Press CH DOWN button on the VCR until the CTL waveform has shifted from its original position (not the position achieved in step 5, but the position of CTL waveform in step 4) by approximately -2msec. Make sure that the envelope is simply attenuated (shrinks in height) once CTL waveform passes its original position and is further brought in the minus direction.
7. Set the Tracking Control Circuit to the center position by pressing the CH UP button and then the PLAY button on the VCR.

1-C. Checking/Adjustment of Envelope Waveform

Purpose:

To achieve a satisfactory picture and precise tracking.

Symptom of Misalignment:

If the envelope output is poor, noise will appear in the picture. The tracking will then lose precision and the playback picture will be distorted by any slight variation of the Tracking Control Circuit.

1. Connect the oscilloscope to TP301 (C-PB) on the Main CBA. Use TP302 (RF-SW) as a trigger.
2. Play back the Gray Scale on the Alignment Tape (FL8NW). Set the Tracking Control Circuit to the center position by pressing the CH UP and then the PLAY button on the VCR. Adjust the height of Guide Rollers [2] and [3] (Fig. M3, Page 2-3-3) watching the oscilloscope display so that the envelope becomes as flat as possible. To do this adjustment, turn the top of the Guide Roller with the Guide Roller Adj. Screwdriver.
3. If the envelope is as shown in Fig. M7, adjust the height of Guide Roller [2] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.
4. If the envelope is as shown in Fig. M8, adjust the height of Guide Roller [3] (Refer to Fig. M3) so that the waveform looks like the one shown in Fig. M9.
5. When Guide Rollers [2] and [3] (Refer to Fig.M3) are aligned properly, there is no envelope drop either at the beginning or end of track as shown in Fig. M9.

Note: Upon completion of the adjustment of Guide Rollers [2] and [3] (Refer to Fig. M3), check the X Value by pushing the CH UP or DOWN buttons alternately, to check the symmetry of the envelope. Check the number of pushes to ensure center position. The number of pushes UP to achieve 1/2 level of envelope should match the number of pushes DOWN from center. If required, redo the "X Value Alignment."

1-D. Azimuth Alignment of Audio/Control/ Erase Head

Purpose:

To correct the Azimuth alignment so that the Audio/Control/Erase Head meets tape tracks properly.

Symptom of Misalignment:

If the position of the Audio/Control/Erase Head is not properly aligned, the Audio S/N Ratio or Frequency Response will be poor.

1. Connect the oscilloscope to the audio output jack on the rear side of the deck.
2. Play back the alignment tape (FL8NW) and confirm that the audio signal output level is 8 kHz.
3. Adjust Azimuth Adj. Screw so that the output level on the AC Voltmeter or the waveform on the oscilloscope is at maximum. (Fig. M6)

Dropping envelope level at the beginning of track.

Fig. M7

Dropping envelope level at the end of track.

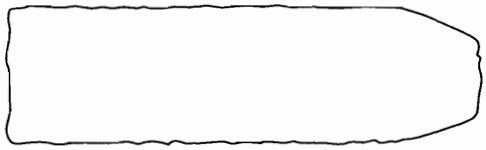


Fig. M8

Envelope is adjusted properly. (No envelope drop)

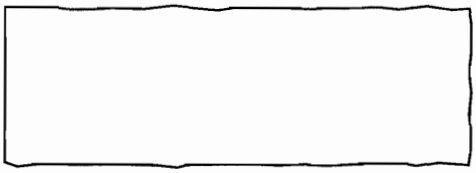


Fig. M9

DISASSEMBLY/ASSEMBLY PROCEDURES OF DECK MECHANISM

Before following the procedures described below, be sure to remove the deck assembly from the cabinet. (Refer to CABINET DISASSEMBLY INSTRUCTIONS on page 1-6-1.)

All the following procedures, including those for adjustment and replacement of parts, should be done in Eject mode; see the positions of [45] and [46] in Fig. DM1 on page 2-4-3. When reassembling, follow the steps in reverse order.

STEP /LOC. No.	START-ING No.	PART		REMOVAL		INSTALLATION
				Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	ADJUSTMENT CONDITION
[1]	[1]	Top Plate	T	DM3	2(S-1), *2(L-1)	
[2]	[1]	Cassette Holder Assembly	T	DM4		
[3]	[2]	Slider L	T	DM5	(S-2)	
[4]	[2]	Slider R	T	DM5	(S-3)	
[5]	[4]	Lock Lever	T	DM5	(S-4), *(P-1)	
[6]	[2]	Cassette Plate	T	DM5		
[7]	[7]	Cylinder Assembly	T	DM1, DM6	3(S-4),VH Connector A and B, ACH Connector AN(6P) and B(6P)	
[8]	[8]	Loading Motor Assembly	T	DM1, DM7	2(S-6), (S-7), LDG Belt, ACH Connector AN(9P) and 9B	
[9]	[1]	Tape Guide Assembly	T	DM1, DM8	*(P-2), (C-8)	
[10]	[1]	Door Opener B	T	DM1, DM8	(S-8), *(L-2)	
[11]	[10]	Pinch Arm (B) Assembly	T	DM1, DM8	*(P-3)	
[12]	[11]	Pinch Arm (A) Assembly	T	DM1, DM8		
[13]	[13]	FE Head	T	DM1, DM9	(S-9)	
[14]	[14]	TG Post Assembly	T	DM1, DM9	*(L-3)	
[15]	[15]	First Post Assembly	T	DM1, DM9	(S-10)	
[16]	[16]	Prism	T	DM1, DM9	(S-11)	
[17]	[17]	Standard Post	T	DM1, DM9	*(L-4)	
[18]	[1]	Slider Shaft	T	DM10	(S-12)	
[19]	[18]	C Drive Lever L	T	DM10		
[20]	[18]	C Drive Lever R	T	DM10		
[21]	[9]	Radiator Plate	B	DM2, DM11	(S-13)	
[22]	[21]	Capstan Motor	B	DM2, DM11	3(S-14), Cap Belt	
[23]	[23]	FF Arm Holder	B	DM2, DM12	(S-15)	
[24]	[23]	Clutch Assembly	B	DM2, DM12	(C-1)	
[25]	[23]	FF Arm	B	DM2, DM12		
[26a]	[26a]	Cam Holder	B	DM2, DM13	(C-2)	
[26b]	[26a]	F Brake Assembly]	B	DM2, DM13		
[27]	[26]	Cam Gear (B)	B	DM2, DM13	(C-3), *(P-4)	
[28]	[28]	Mode Gear	B	DM2, DM14	(C-4)	
[29]	[28]	Mode Lever	B	DM2, DM14	(C-5)	
[30]	[29]	Cam Gear (A)	B	DM2, DM14		
[31]	[30]	Pully Assembly	B	DM2, DM14		

STEP /LOC. No.	START-ING No.	PART		REMOVAL		INSTALLATION
				Fig. No.	REMOVE/*UNHOOK/ UNLOCK/RELEASE/ UNPLUG/DESOLDER	ADJUSTMENT CONDITION
[32]	[31]	Worm Holder	B	DM2, DM14	(S-16)	
[33]	[29]	Sensor Gear	B	DM1, DM15	(C-6)	
[34]	[29]	Idler Assembly	B	DM1, DM15		
[35]	[29]	BT Arm	B	DM2, DM15	*(P-5)	
[36]	[29]	Loading Arm S Assembly	B	DM2, DM15		(+) Refer to Alignment Sec. Pg. 2-4-9
[37]	[36]	Loading Arm T Assembly	B	DM2, DM15		(+) Refer to Alignment Sec. Pg. 2-4-9
[38]	[29]	M Brake T Assembly	T	DM1, DM16	*(P-6)	
[39]	[39]	M Brake S Assembly	T	DM1, DM16	*(P-7)	
[40]	[39]	Tension Lever Sub Assembly	T	DM1, DM16	*(P-8), (C-9)	
[41]	[40]	T Lever Holder	T	DM1, DM16	*(L-5)	
[42]	[2]	M Gear	T	DM1, DM16	(C-7)	
[43]	[38]	Reel T	T	DM1, DM16	Poly Slider Washer	
[44]	[40]	Reel S	T	DM1, DM16	Poly Slider Washer	
[45]	[44]	Moving Guide S Preparation	T	DM1, DM17	(S-17), Slide Holder S	
[46]	[37]	Moving Guide T Preparation	T	DM1, DM17	(S-18), Slide Holder T	
[47]	[30]	Rack Assembly	R	DM18		(+) Refer to Alignment Sec. Pg. 2-4-10
[48]	[47]	F Door Opener A	R	DM18	*(P-9)	
[49]	[49]	Cleaner Lever Assembly	T	DM1,DM6		
[50]	[49]	CL Post	T	DM1,DM6	*(L-6)	
↓ ①	↓ ②	↓ ③	↓ ④	↓ ⑤	↓ ⑥	↓ ⑦

①: Follow steps in sequence. When reassembling, follow the steps in reverse order.
These numbers are also used as Identification (location) No. of parts in the figures.

②: Indicates the part to start disassembling with in order to disassemble the part in column (1).

③: Name of the part

④: Location of the part: T=Top B=Bottom R=Right L=Left

⑤: Figure Number

⑥: Identification of parts to be removed, unhooked, unlocked, released, unplugged, unclamped, or desoldered.
P=Spring, W=Washer, C=Cut Washer, S=Screw, *=Unhook, Unlock, Release, Unplug, or Desolder
e.g., 2(L-2) = two Locking Tabs (L-2).

⑦: Adjustment Information for Installation
(+): Refer to Deck Exploded Views for lubrication.

Top View

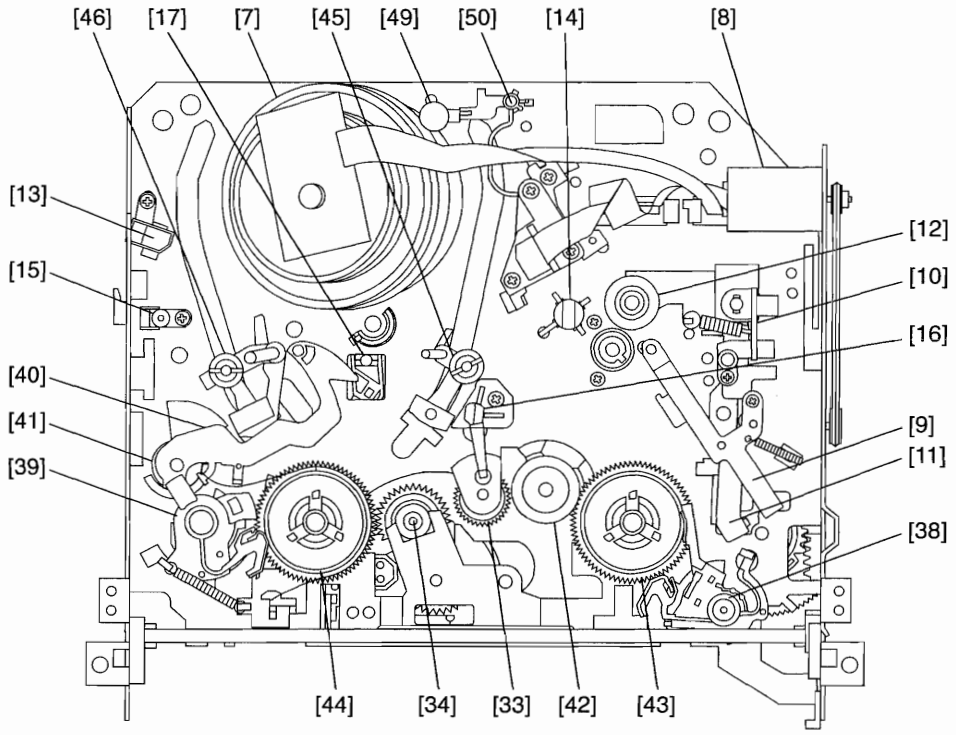


Fig. DM1

Bottom View

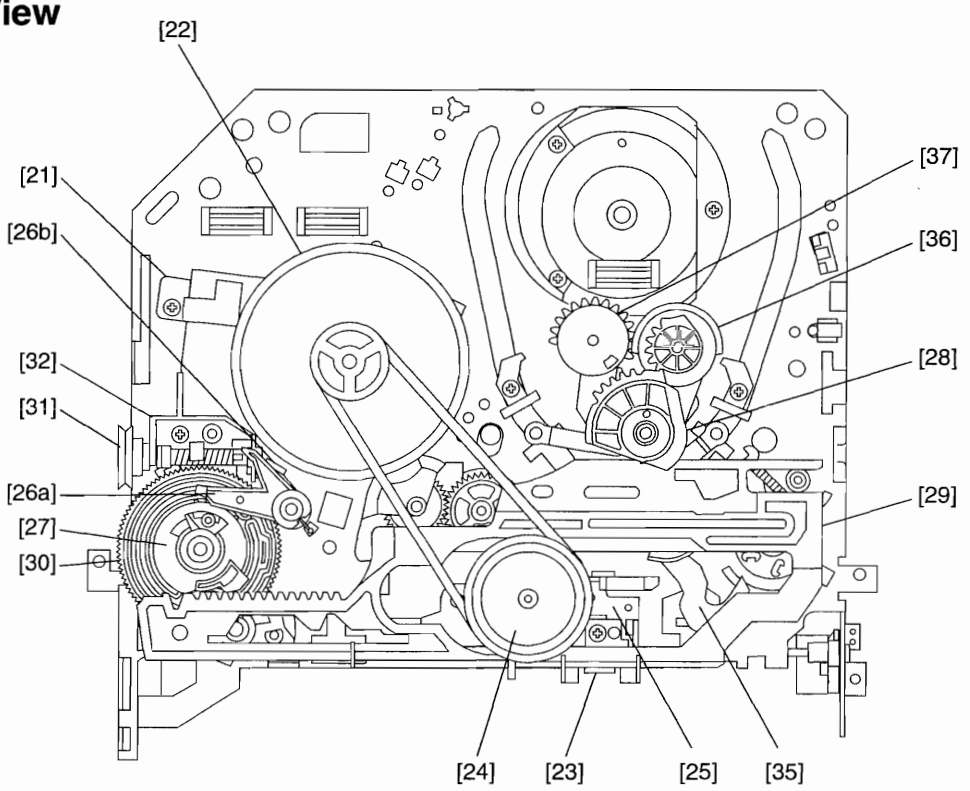


Fig. DM2

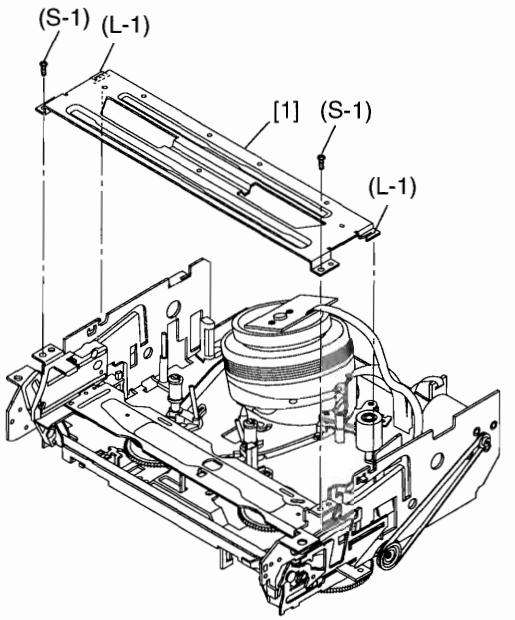


Fig. DM3

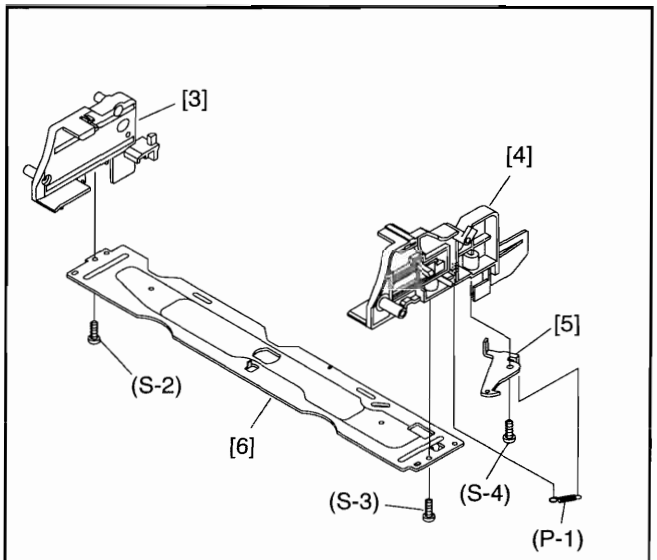
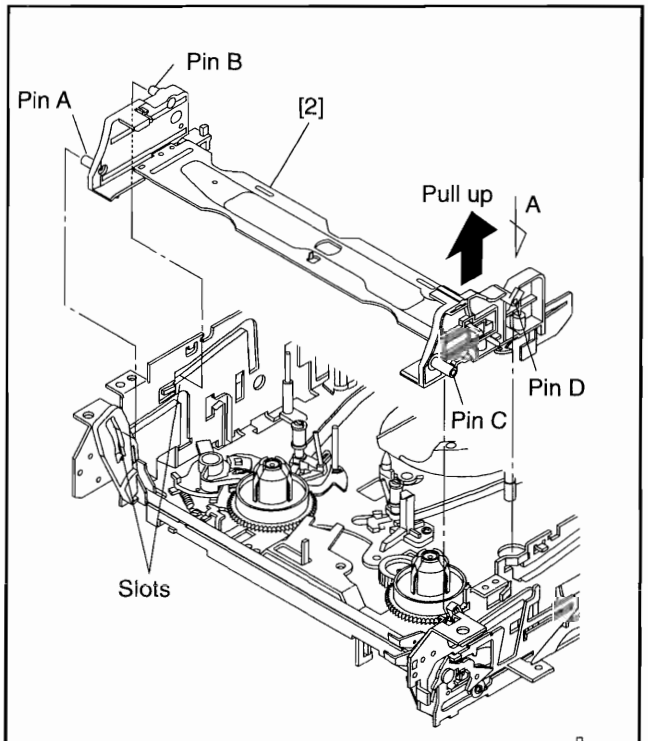


Fig. DM5



First, insert Pin A and Pin B on the Cassette Holder Assembly into the slots as shown. Then, while pushing the locking tab as shown in the right, pull up the right side on the Cassette Holder Assembly to release Pin C and Pin D.

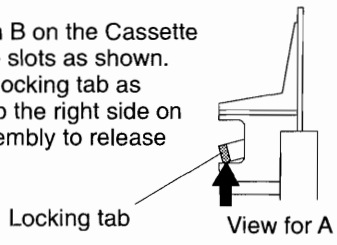


Fig. DM4

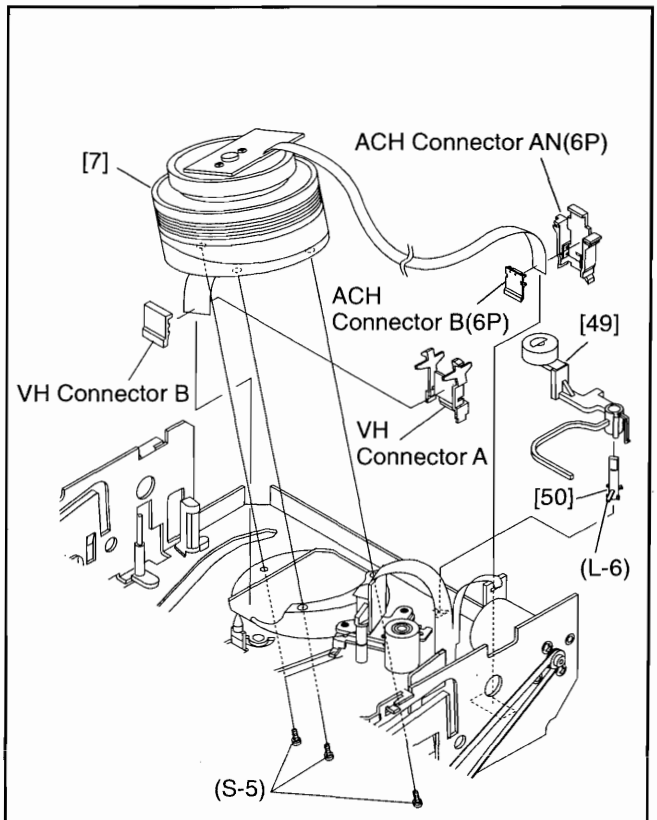


Fig. DM6

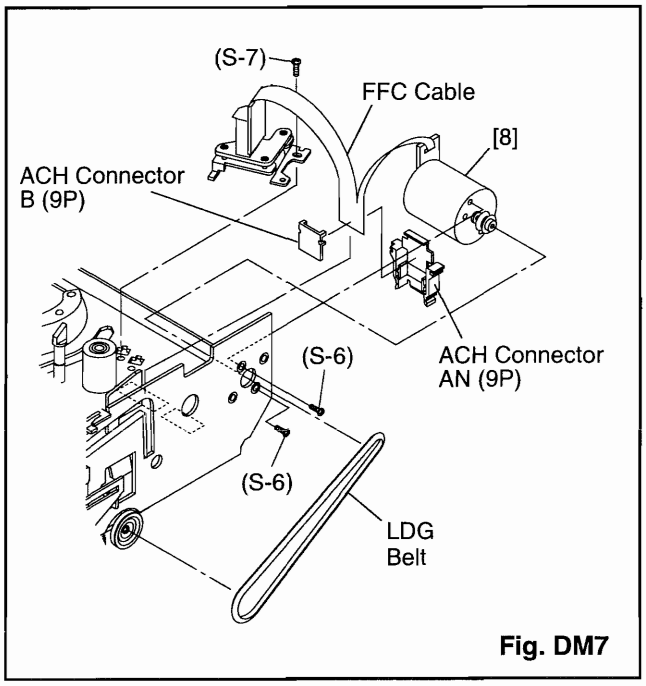


Fig. DM7

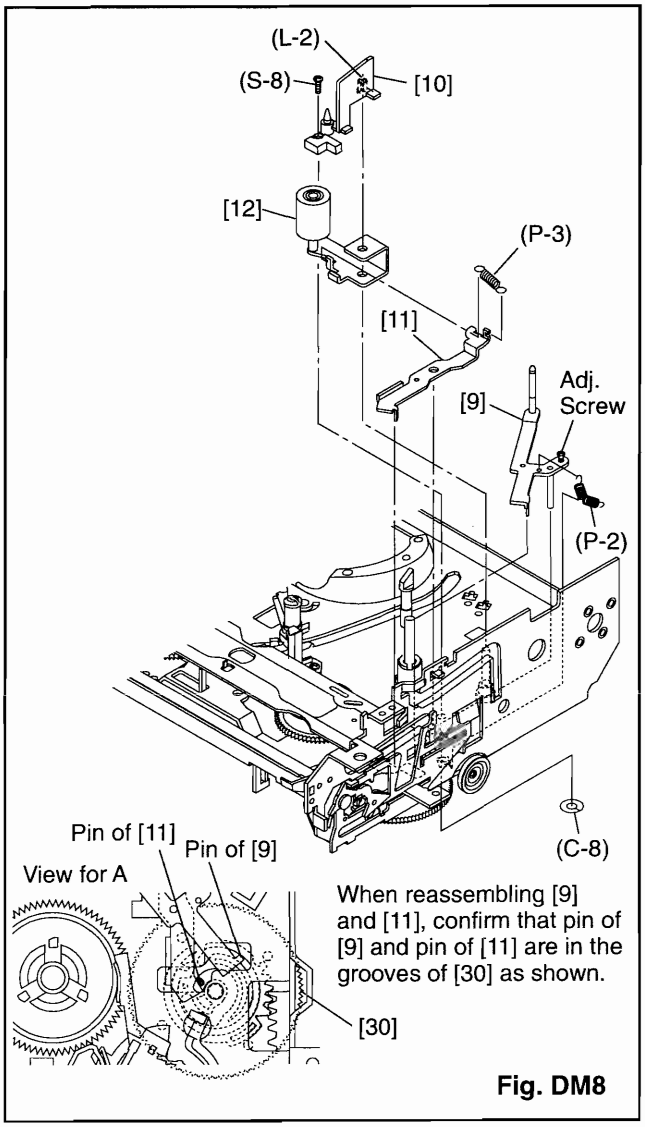


Fig. DM8

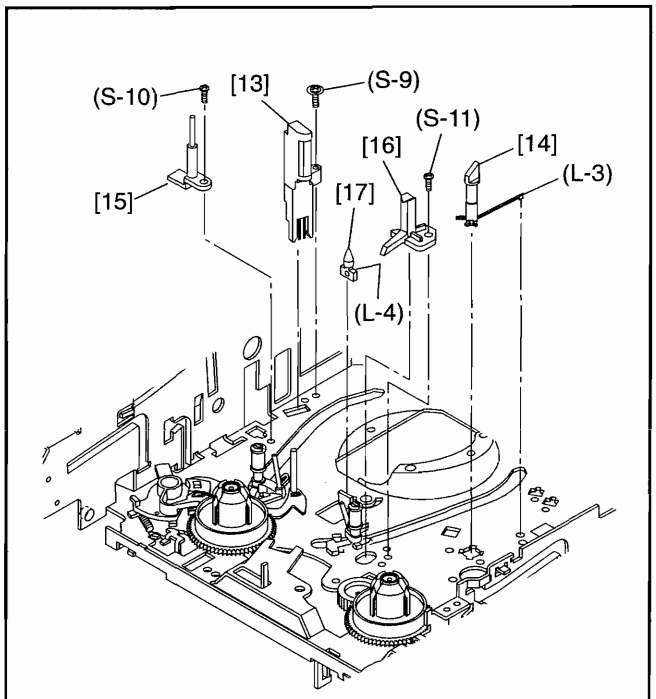


Fig. DM9

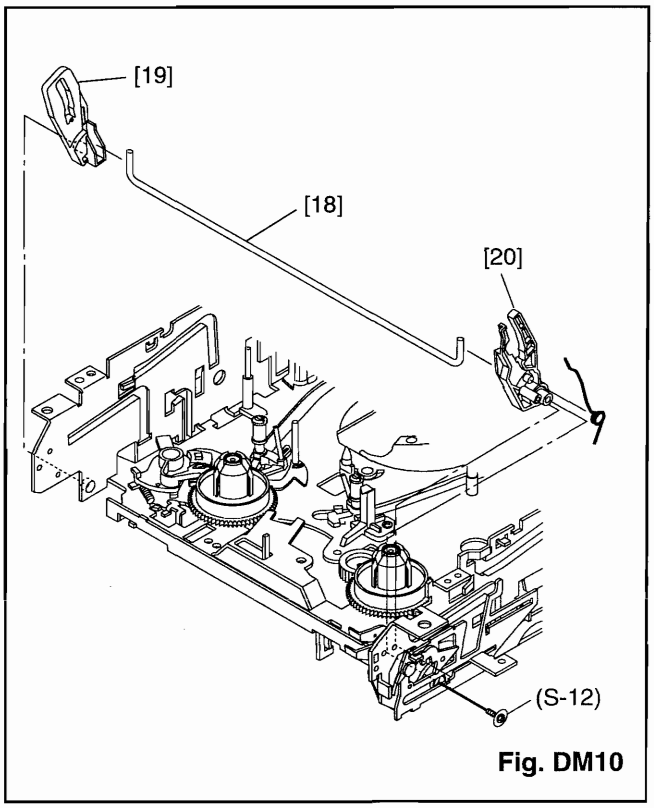


Fig. DM10

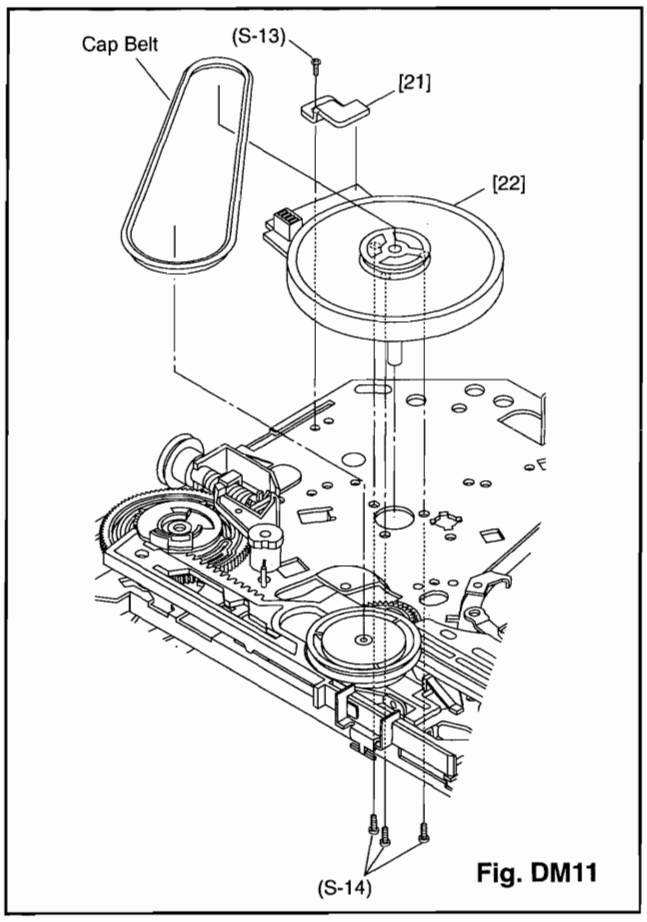


Fig. DM11

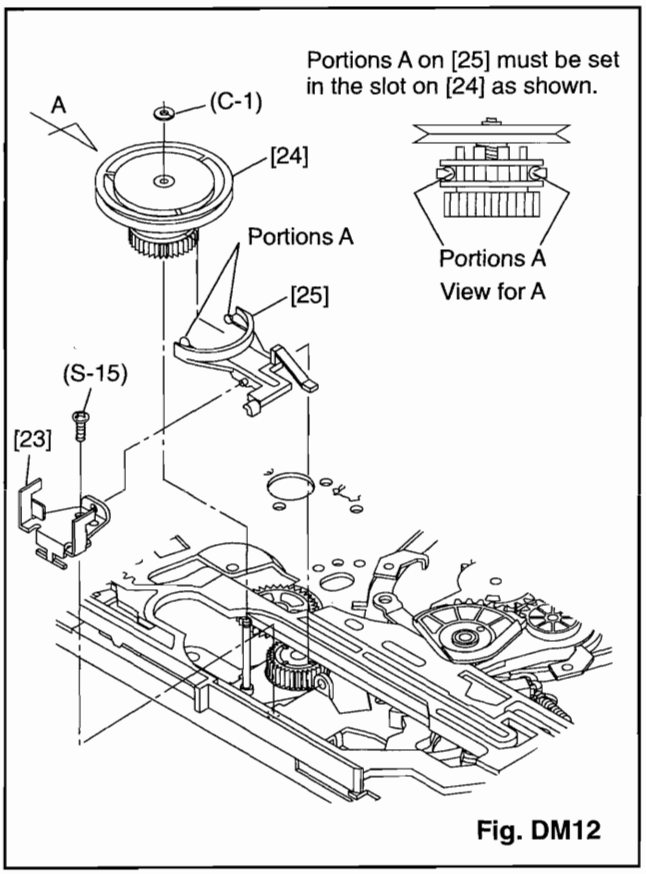


Fig. DM12

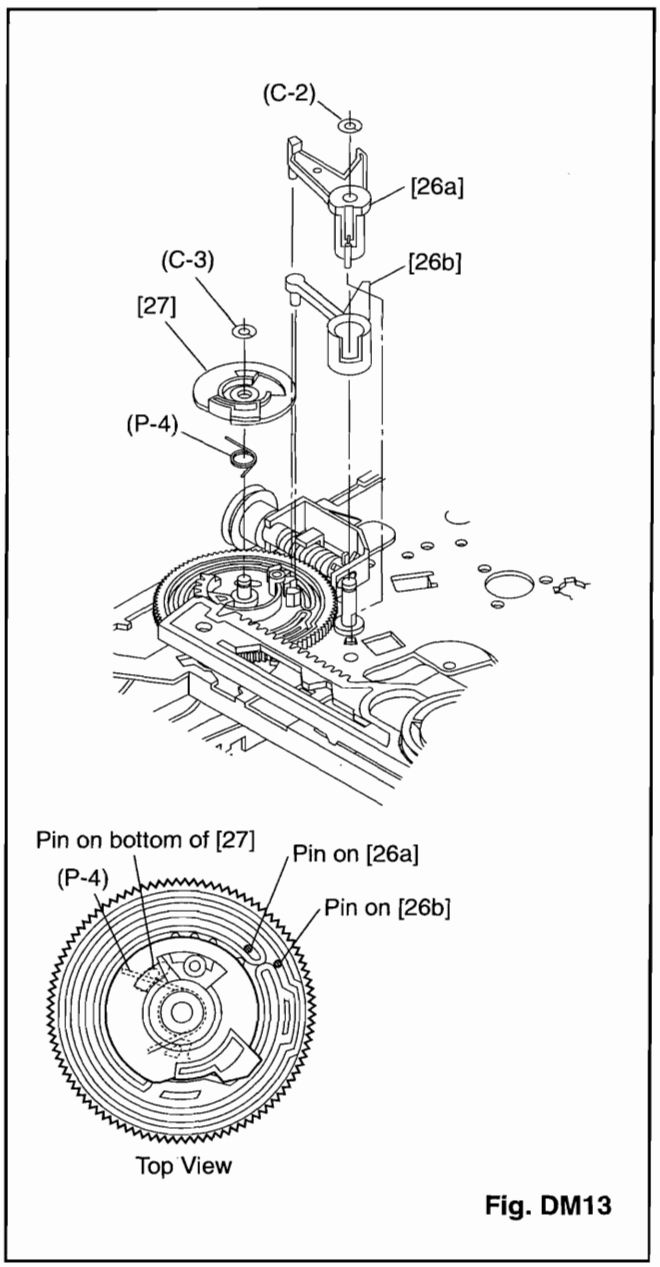
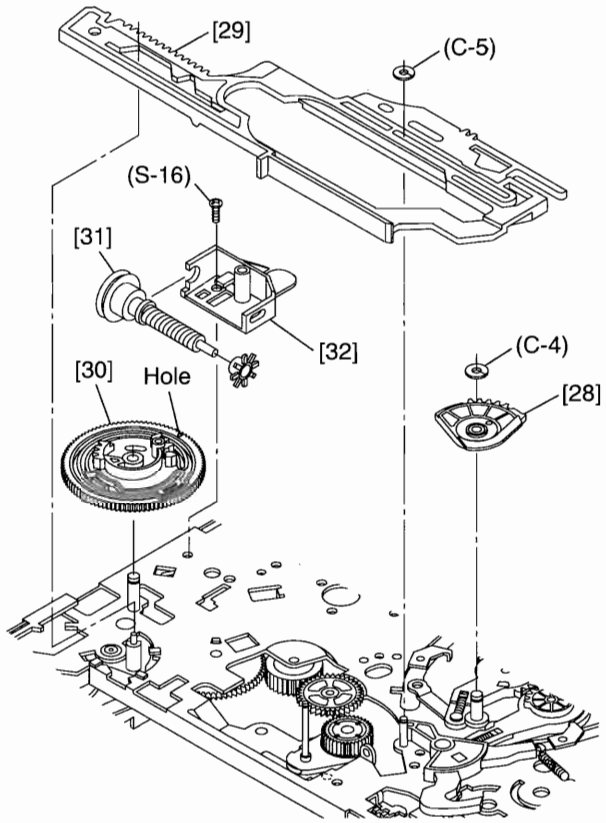


Fig. DM13

When reassembling [30],
confirm that the hole on [30]
is in the correct position as shown.



Position of Mode Lever when installed

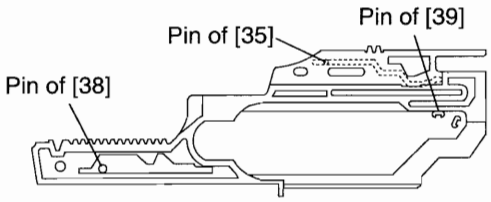


Fig. DM14

Refer to the Alignment Section, Page 2-4-9.

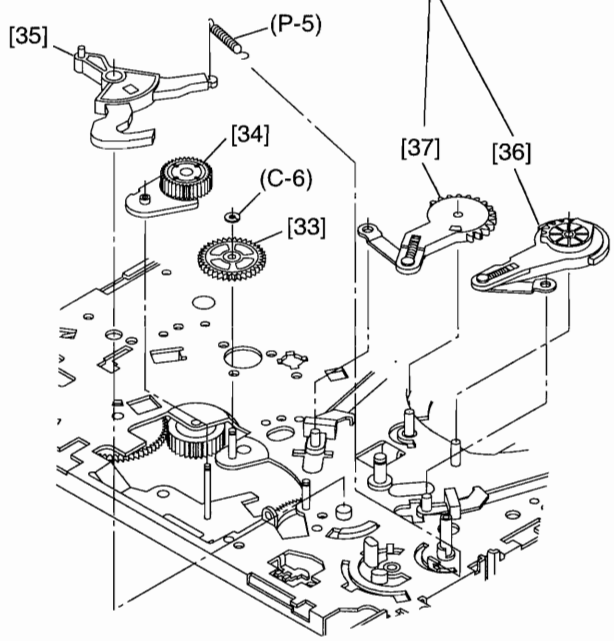


Fig. DM15

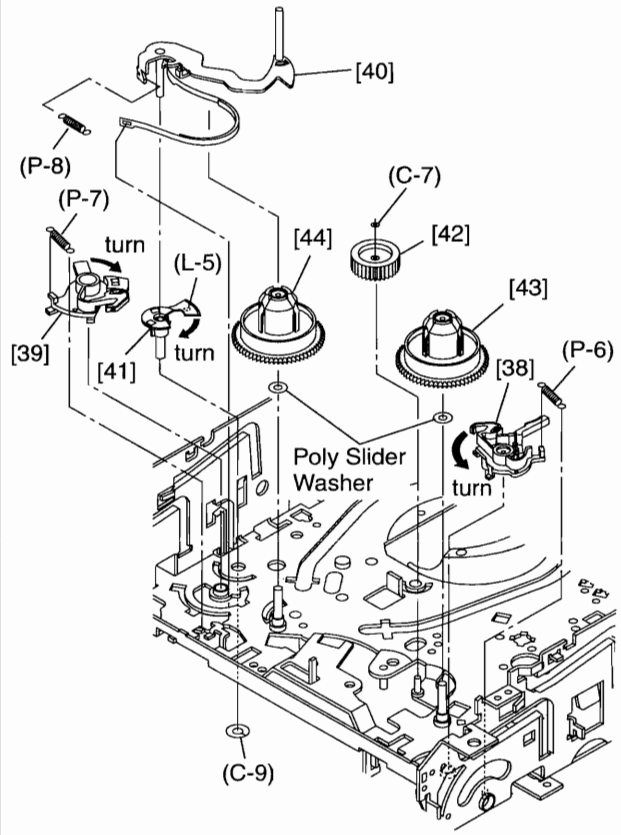


Fig. DM16

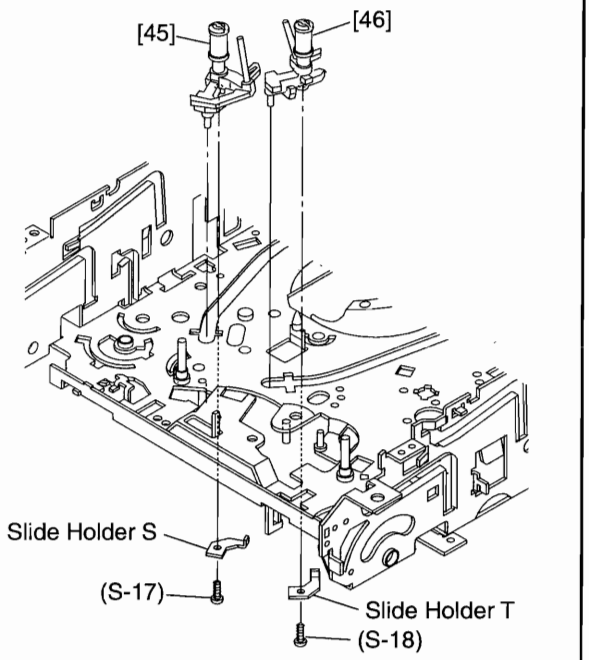


Fig. DM17

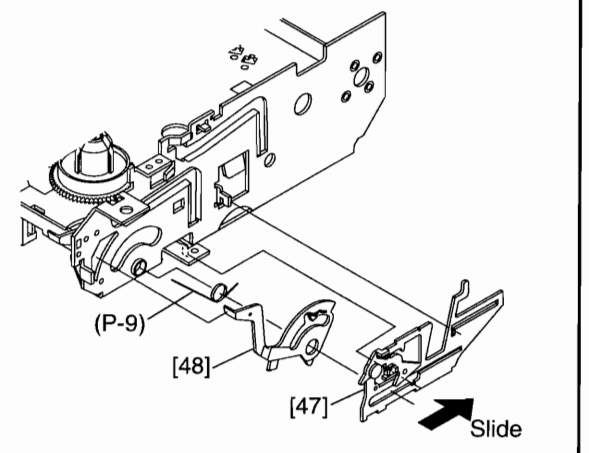


Fig. DM18

ALIGNMENT PROCEDURES OF MECHANISM

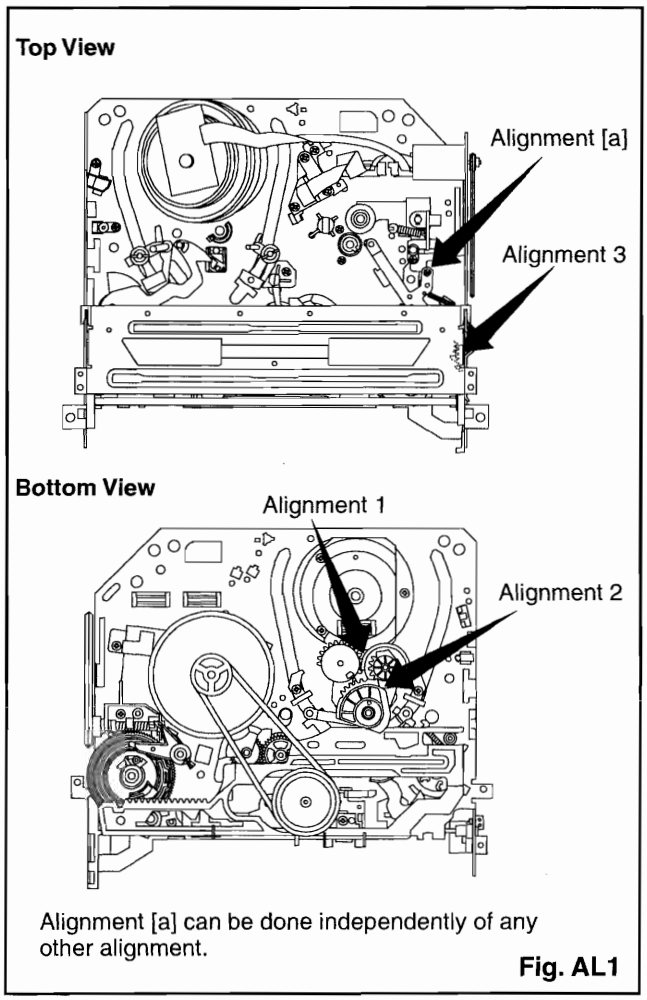
The following procedures describe how to align the individual gears and levers that make up the tape loading/unloading mechanism. Since information about the state of the mechanism is provided to the System Control Circuit only through the Mode Switch, it is essential that the correct relationship between individual gears and levers be maintained.

All alignments are to be performed with the mechanism in Eject mode, in the sequence given. Each procedure assumes that all previous procedures have been completed.

IMPORTANT:

If any one of these alignments is not performed properly, even if off by only one tooth, the unit will unload or stop and it may result in damage to the mechanical or electrical parts.

Alignment points in Eject Position



Alignment [a] can be done independently of any other alignment.

Fig. AL1

Alignment 1

Loading Arm, S and T Assembly

Install Loading Arm S and T Assembly so that their triangle marks point to each other as shown in Fig. AL2.

Alignment 2

Mode Gear

Keeping the two triangles pointing at each other, install the Loading Arm T Assembly so that the last tooth of the gear meets the most inside teeth of the Mode Gear. See Fig. AL2.

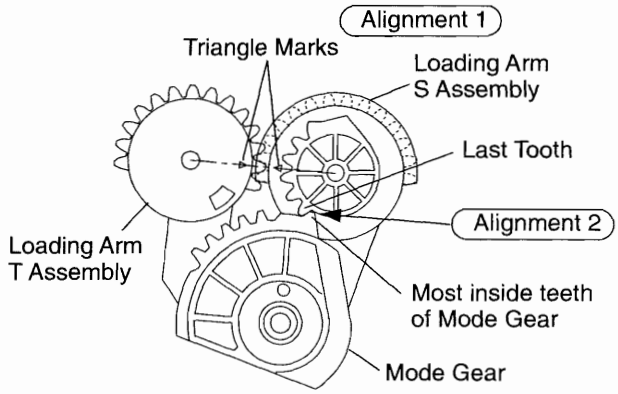


Fig. AL2

Alignment [a]

Tape Guide Assembly

Measurement of the screw must be as specified in Fig. AL3.

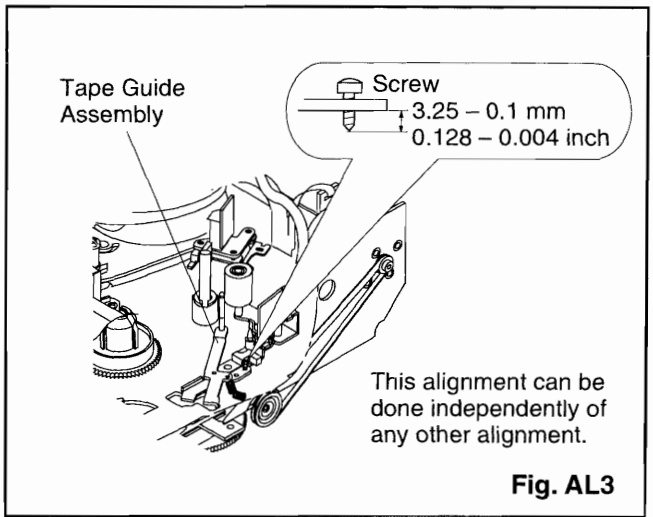


Fig. AL3

Alignment 3

Cam Gear (A), Rack Assembly

Install the Rack Assembly so that the first tooth on the gear of the Rack Assembly meets the first groove on the Cam Gear (A) as shown in Fig. AL4.

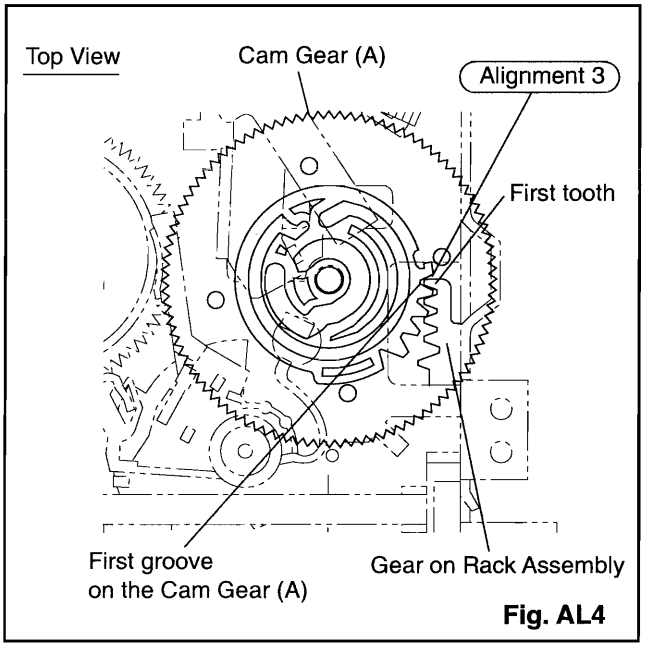


Fig. AL4

EXPLODED VIEWS AND PARTS LIST SECTION

VIDEO CASSETTE RECORDER

SL260B/6260VB/EWV601

Sec. 3: Exploded views and Parts List Section

- **Exploded views**
- **Parts List**

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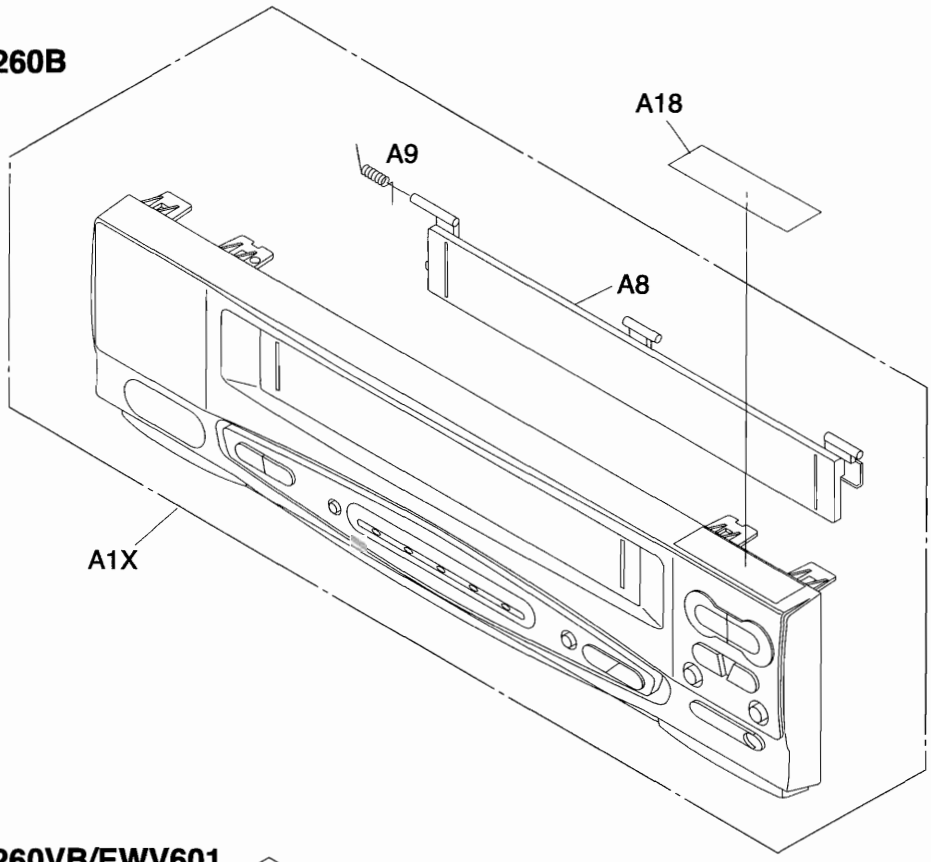
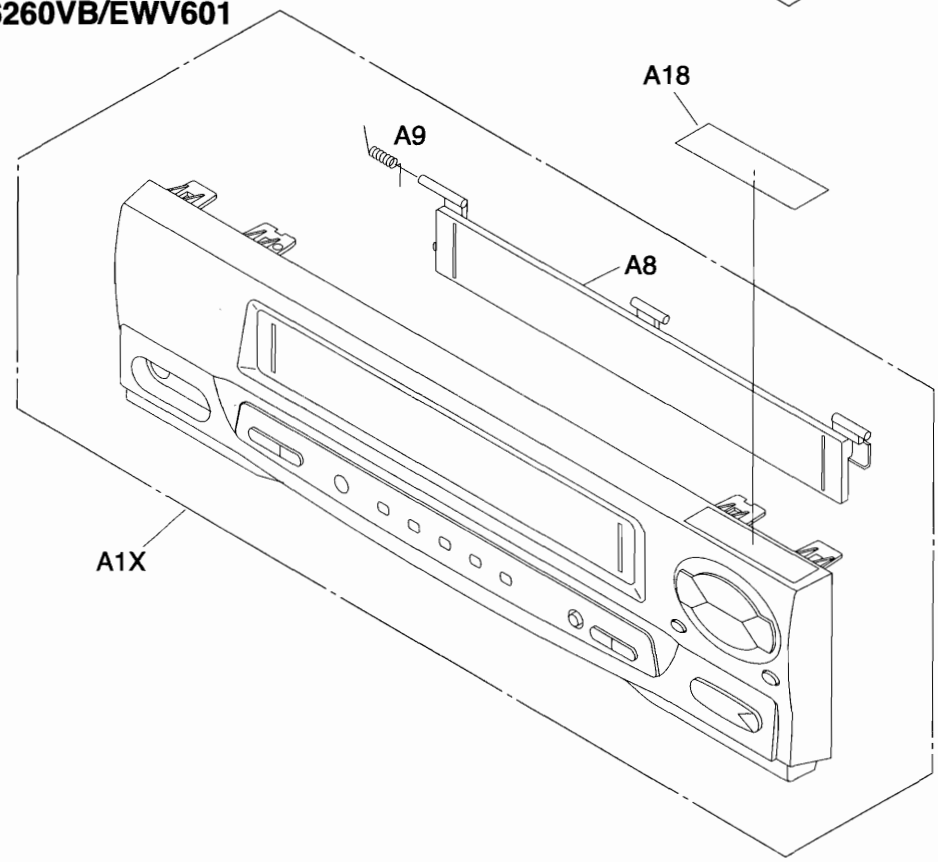
EXPLODED VIEWS

Front Panel

SL260B



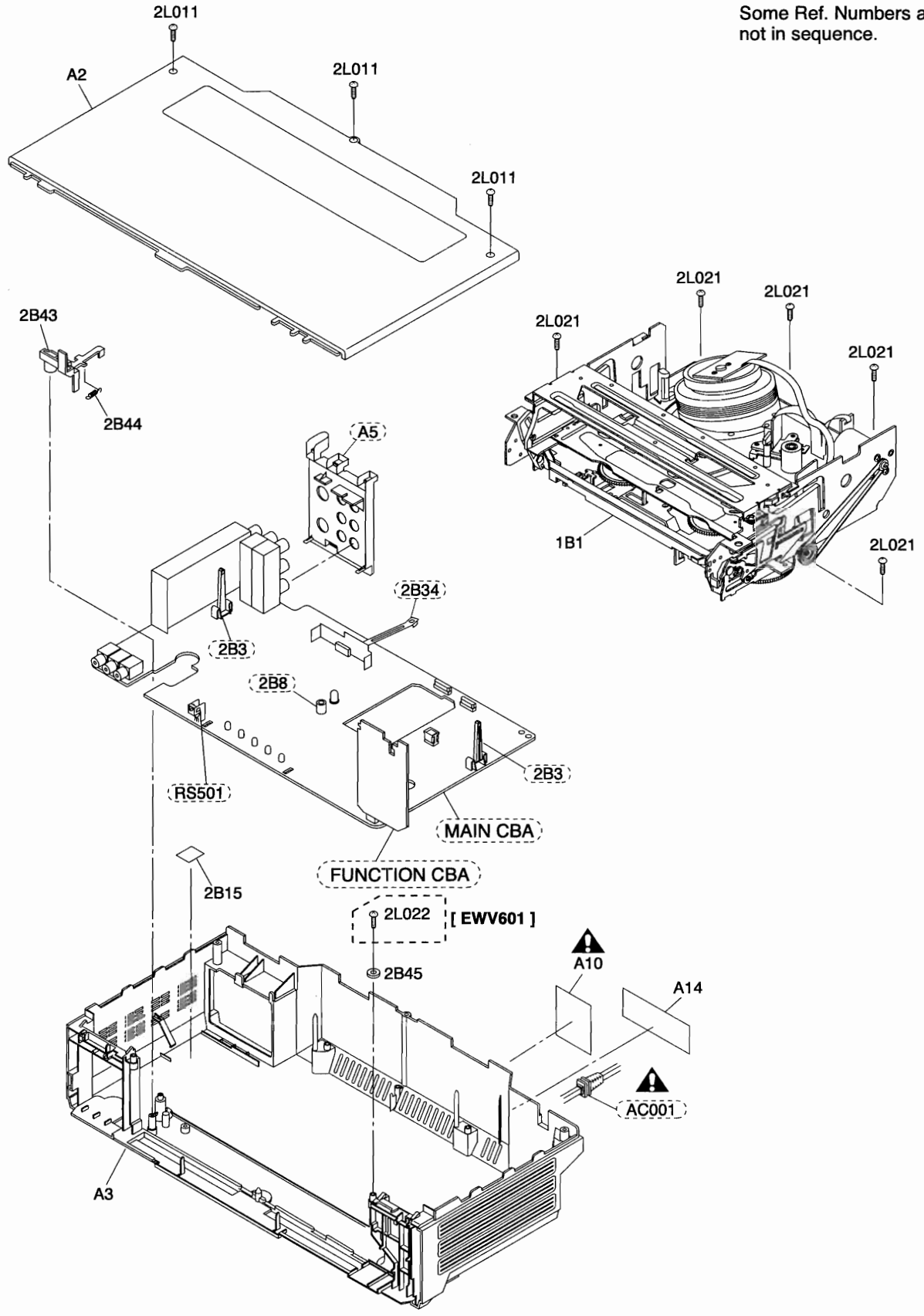
6260VB/EWV601



Cabinet

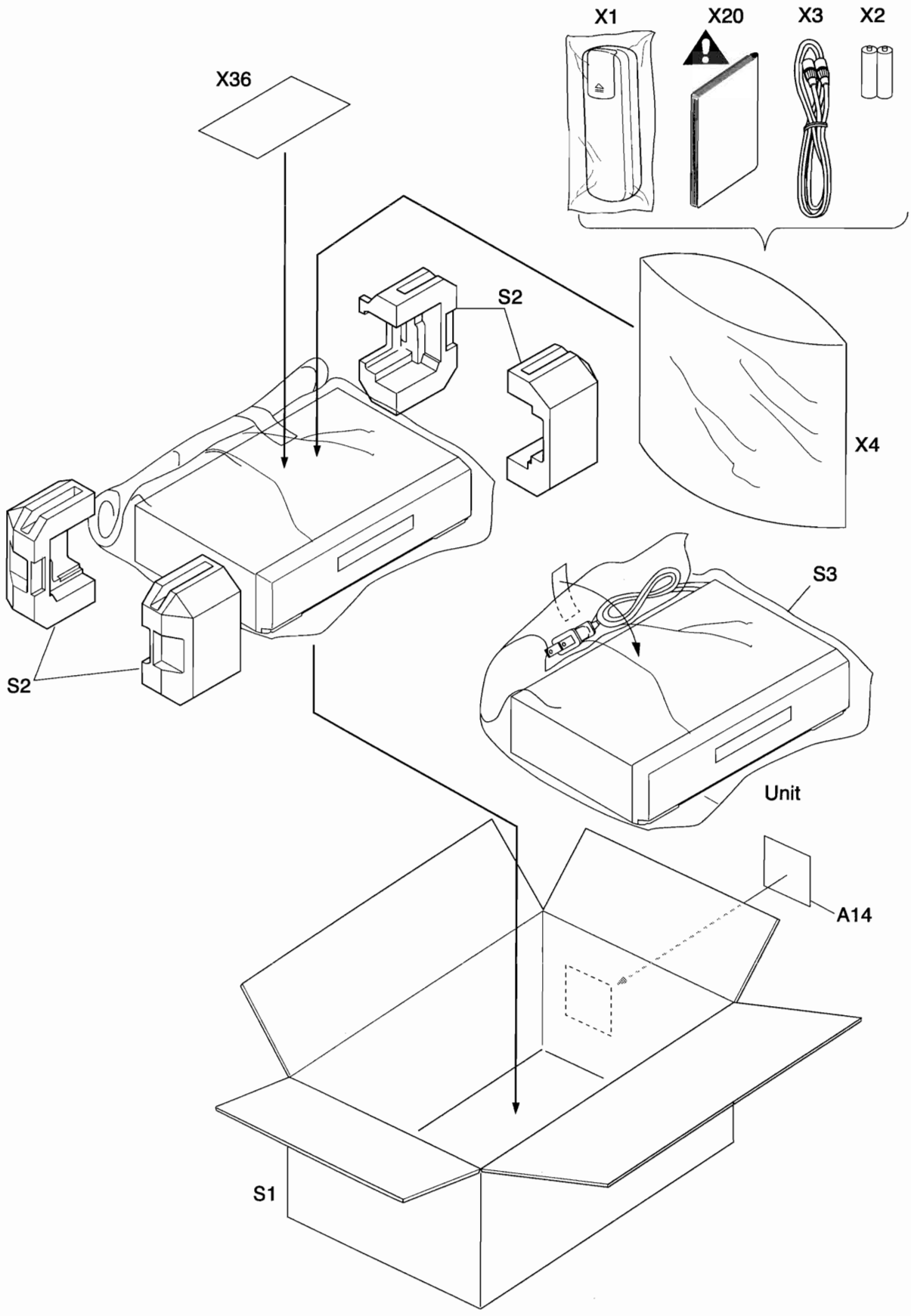
( ) See Electrical Parts List for parts with this mark.

Some Ref. Numbers are not in sequence.



Packing

Some Ref. Numbers are not in sequence.



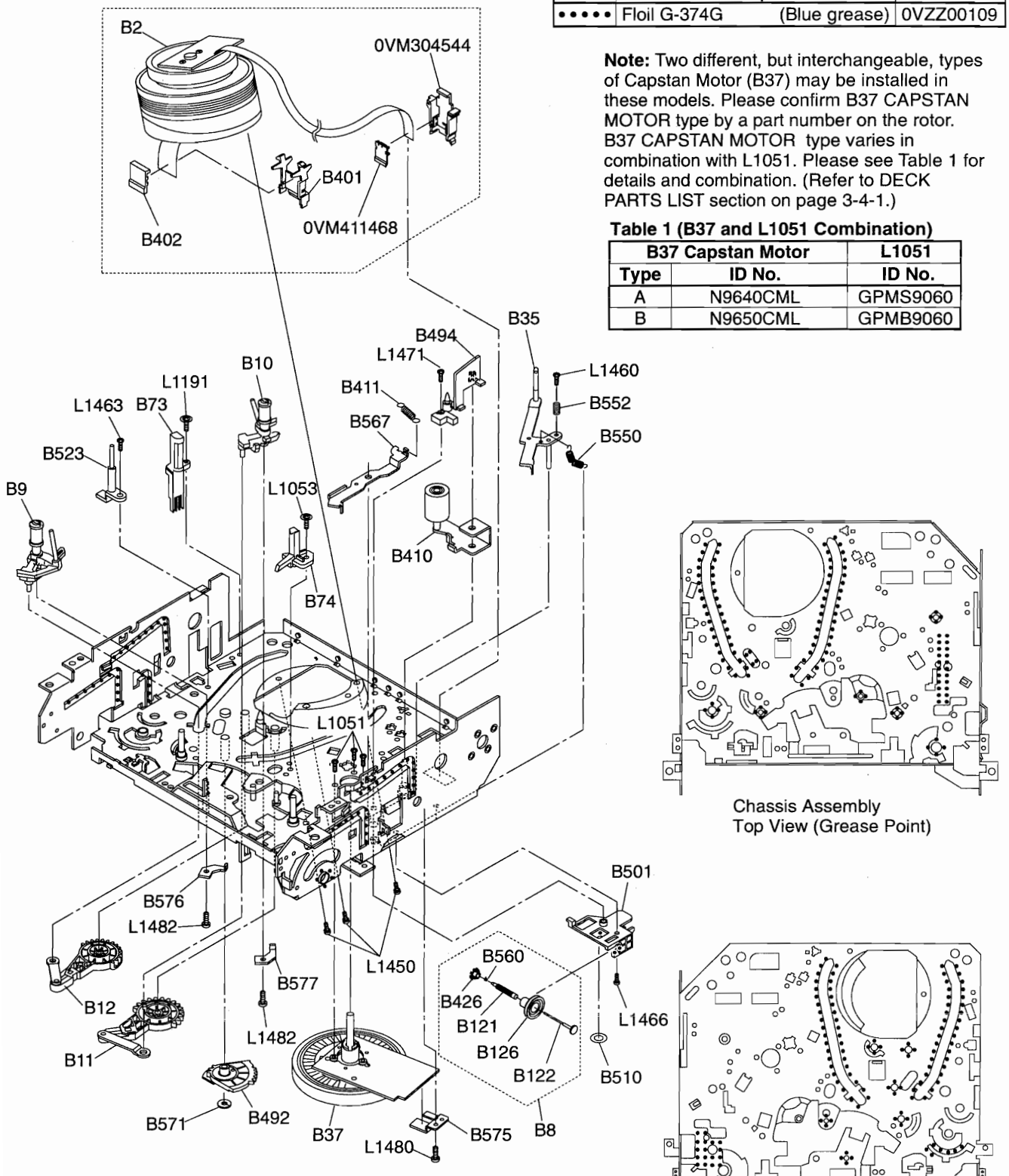
Deck Mechanism View 1

Mark	Description		Part No.
•••••	Floil G-374G	(Blue grease)	0VZZ00109

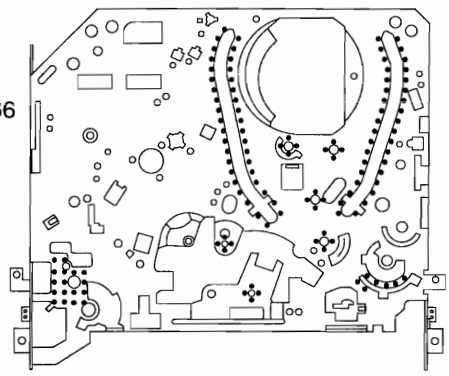
Note: Two different, but interchangeable, types of Capstan Motor (B37) may be installed in these models. Please confirm B37 CAPSTAN MOTOR type by a part number on the rotor. B37 CAPSTAN MOTOR type varies in combination with L1051. Please see Table 1 for details and combination. (Refer to DECK PARTS LIST section on page 3-4-1.)

Table 1 (B37 and L1051 Combination)

B37 Capstan Motor		L1051
Type	ID No.	ID No.
A	N9640CML	GPMS9060
B	N9650CML	GPMB9060



Chassis Assembly
Top View (Grease Point)

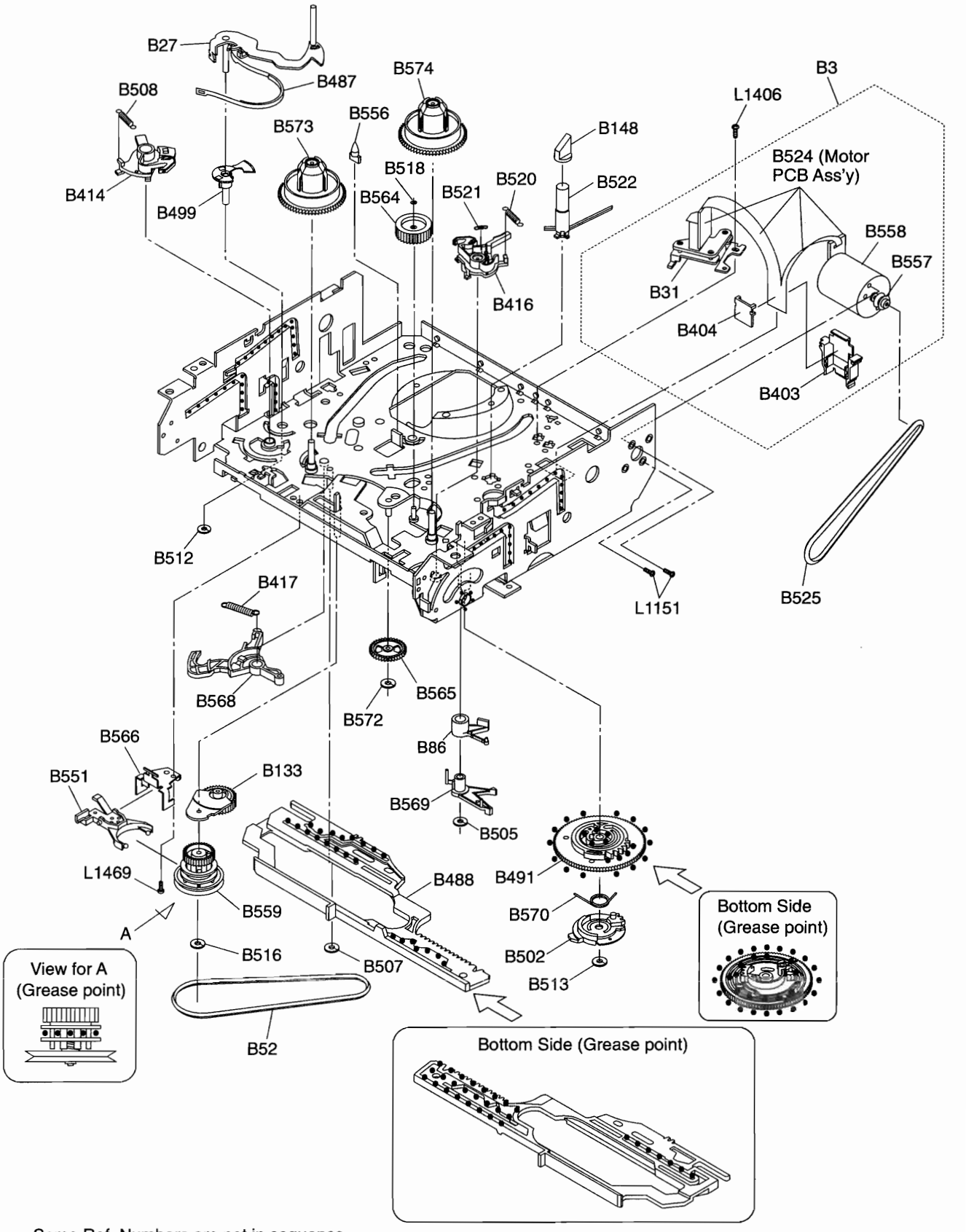


Chassis Assembly
Bottom View (Grease Point)

Some Ref. Numbers are not in sequence.

Deck Mechanism View 2

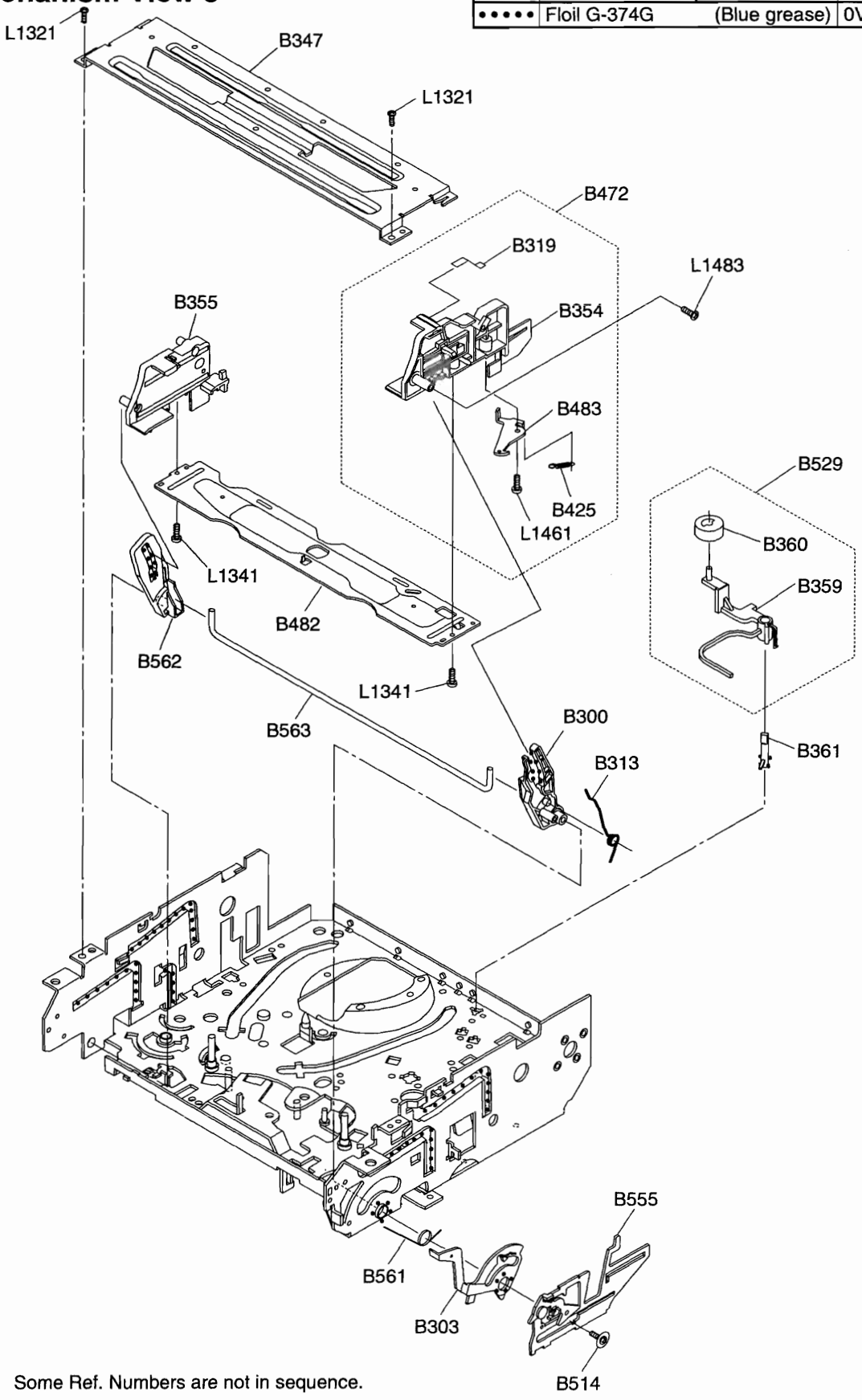
Mark	Description		Part No.
•••••	Floil G-374G	(Blue grease)	0VZZ00109



Some Ref. Numbers are not in sequence.

Deck Mechanism View 3

Mark	Description		Part No.
•••••	Floil G-374G	(Blue grease)	0VZZ00109



Some Ref. Numbers are not in sequence.

MECHANICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTES:

1. B359, B360, B361 and B529:
   See Deck Exploded View 3. (Refer to page 3-1-6)
2. Comparison chart of Models and Marks:

Model	Mark
SL260B	A
6260VB	B
EWV601	C

Ref. No.	Mark	Description	Part No.
A1X	A	FRONT ASSEMBLY H7900UD	0VM202978
A1X	B	FRONT ASSEMBLY H7930UD	0VM202976
A1X	C	FRONT ASSEMBLY H7931UD	0VM203042
A2		CASE, TOP(U23) H7700UD	0VM100923
A3		CHASSIS(U23) H7700UD	0VM000122
A5		JACK BOARD(HI-FI) H36D4PX:PHILIP-PINE (See Electrical Parts List)	
A8	A	DOOR, CASSETTE H7900UD	0VM411493
A8	B,C	DOOR, CASSETTE H7930UD	0VM411490
A9		SPRING, DOOR H7220UD U15	0VM408617
A10 ⚠	A	LABEL, RATING H7900UD	0VM411585
A10 ⚠	B	LABEL, RATING H7930UD	0VM411633
A10 ⚠	C	LABEL, RATING H7931UD	0VM411669
A14	A,B,C	LABEL, BAR CODE H5700UD	0VM410318
A14	A	LABEL, BAR CODE H7900UD	0VM411586
A14	B	LABEL, BAR CODE H7930UD	0VM411634
A14	C	LABEL, BAR CODE H7931UD	0VM411688
A18	A	LABEL, TELEPHONE NUMBER H5720UD	0VM410319
A18	B	LABEL, TELEPHONE NUMBER H5730UD(SYLVANIA)	0VM410320
A18	C	LABEL, TELEPHONE NUMBER H7931UD(EMERSON)	0VM411684
AC001 ⚠		AC CORD WAC0172LTE01 or	
		AC CORD LA-2366 (See Electrical Parts List)	
B359		CLEANER LEVER MK10	0VM304413
B360		CLEANER ROLLER MK9	0VM410032C
B361		CL POST MK10	0VM411114
B529		CLEANER ASSEMBLY MK10	0VSA11161
1B1		DECK ASSEMBLY CZD006/VM1260	N1260FL
2B3		HOLDER, SENSOR(2) H5700UD (See Electrical Parts List)	
2B8		BUSH, LED(F) H3700UD (See Electrical Parts List)	
2B15		TAPE, HIMELON H7700UD(10*15) (See Electrical Parts List)	
2B34		SHIELD, HEAD H7700UD (See Electrical Parts List)	
2B43		REC ARM H7700UD	0VM202907
2B44		REC ARM SPRING MK6	0VM407708C
2B45		SPACER H7700UD	0VM411667
2L011		SCREW, P-TIGHT 3X10 BIND HEAD+	GBEP3100
2L021		SCREW, P-TIGHT M3X10 WASHER HEAD+	GCMP3100
2L022	C	SCREW, P-TIGHT 3X12 WASHER HEAD+	GCMP3120
RS501		REMOTE RECEIVER PIC-37042LU (See Electrical Parts List)	
PACKING			
S1	A	GIFT BOX CARTON H7900UD	0VM304614
S1	B	GIFT BOX CARTON H7930UD	0VM304626
S1	C	GIFT BOX CARTON H7931UD	0VM304653
S2		STYROFOAM(U23F-CORP) H7700UD	0VM202936
S3		UNIT, BAG V4010PA	0VM406453B
ACCESSORIES			
X1		REMOTE CONTROL UNIT 364/CRC005 or	N9374UD
		REMOTE CONTROL UNIT 364/CRC005	N9377UD
X2		DRY BATTERY R6P/2S or	XB0M451T0001
		DRY BATTERY(SUNRISE) R6SSE/2S	XB0M451MS002
X3		RF CABLE WPZ0901TM001 or	WPZ0901TM001
		RF CABLE SD-0121	WPZ0901LW001
X4		ACCESSORY BAG H3600UD T=0.03	0VM409454
X20 ⚠	A	OWNER'S MANUAL H7900UD	0VMN02614
X20 ⚠	B	OWNER'S MANUAL H7930UD	0VMN02627
X20 ⚠	C	OWNER'S MANUAL H7931UD	0VMN02638
X36	A	RETURN STOP SHEET H7900UD	0VM411578
X36	B	RETURN STOP SHEET H7930UD	0VM411579
X36	C	RETURN STOP SHEET H7931UD	0VM411668

ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTE: Products marked with a ⚠ have special characteristics important to safety. Before replacing any of these components, read carefully the product safety notice in this service manual. Don't degrade the safety of the product through improper servicing.

NOTES:

1. Parts that not assigned part numbers (---------) are not available.
2. Tolerance of Capacitors and Resistors are noted with the following symbols.

C.....±0.25%	D.....±0.5%	F.....±1%
G.....±2%	J.....±5%	K.....±10%
M.....±20%	N.....±30%	Z.....+80/-20%

3. LED Type:
   When it is necessary to replace one or more of the following diodes, all five should be replaced: D595, D596, D597, D598, D599.
4. Comparison chart of Models and Marks:

Model	Mark
SL260B	A
6260VB	B
EWV601	C

5. MCV CBA includes two kinds of Type A and Type B by a difference of IC. Please distinguish them by a number on IC.

Type	Number	Ref.No.
A	LA72653M	IC451
B	LA72652M	IC451

A list of MCV CBA (Type B) mentions only difference parts with MCV CBA (Type A)

MCV CBA (Type A)

Ref.No.	Mark	Description	Part No.
	A B,C	MCV CBA (MAIN+FUNCTION) MCV CBA (MAIN+FUNCTION) Consists of the following	0VSA11248 0VSA11293
		MAIN CBA (MCV-A) FUNCTION CBA (MCV-B)	---------- ----------

MAIN CBA

Ref.No.	Mark	Description	Part No.
		MAIN CBA (MCV-A) Consists of the following	----------
		CAPACITORS	
C001 ⚠		METALLIZED FILM CAP. 0.01µF/250V K or	CT2E103DC011
		METALLIZED FILM CAP. 0.01µF/250V M	CT2E103MS037
C002 ⚠		SAFETY CAP. 2200pF/250V or	CCG2EMA0F222
		SAFETY CAP. 2200pF/250V	CA2E222MR046
C003		ELECTROLYTIC CAP. 82µF/200V M or	CA2D820S6011
		ELECTROLYTIC CAP. 82µF/200V M	CA2D820NC088
C004		CERAMIC CAP. B K 120pF/500V	CCD2JKP0B121
C007		CERAMIC CAP. B K 3300pF/50V	CCD1JKS0B332
C009		CERAMIC CAP.(AX) X K 5600pF/16V	CCA1CKT0X562
C013		ELECTROLYTIC CAP. 10µF/50V M H7	CE1JMASSL100
C018		ELECTROLYTIC CAP. 470µF/16V M or	CE1CMASDL471
		ELECTROLYTIC CAP. 470µF/16V M	CE1CMASTL471
C019		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C020		ELECTROLYTIC CAP. 1000µF/10V M or	CE1AMZPDL102
		ELECTROLYTIC CAP. 1000µF/10V M	CE1AMZPTL102
C024		CERAMIC CAP. SL J 390pF/50V	CCD1JJSSL391
C026		ELECTROLYTIC CAP. 2.2µF/250V M or	CA2E2R2S6009
		ELECTROLYTIC CAP. 2.2µF/250V M(105°C)	CE2EMASTH2R2
C031		CERAMIC CAP.(AX) X K 5600pF/16V	CCA1CKT0X562
C051		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C054		CHIP CERAMIC CAP. B K 0.047µF/50V or	CHD1JK30B473
		CHIP CERAMIC CAP. B K 0.047µF/25V	CHD1EK30B473
C253		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C255		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V	CZM1CZ30F103
C256		ELECTROLYTIC CAP. 220µF/6.3V M H7	CE0KMASSL221
C257		CHIP CERAMIC CAP. B K 0.022µF/50V or	CHD1JK30B223
		CHIP CERAMIC CAP. B K 0.022µF/25V	CHD1EK30B223
C301		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C303		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C304		CHIP CERAMIC CAP.(MELF) Y K 1000pF/35V	CZM1GK30Y102
C305		CHIP CERAMIC CAP.(MELF) Y K 2200pF/35V	CZM1GK30Y222
C306		CHIP CERAMIC CAP.(MELF) W K 470pF/50V	CZM1JK30B471
C307		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C308		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C309		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C310		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C311		CHIP CERAMIC CAP. CH J 390pF/50V	CHD1JJ3CH391
C312		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C313		CHIP CERAMIC CAP. CH J 18pF/50V	CHD1JJ3CH180
C314		CHIP CERAMIC CAP.(MELF) SL J 100pF/50V	CZM1JJ3SL101
C315		CHIP CERAMIC CAP.(MELF) SL J 100pF/50V	CZM1JJ3SL101
C317		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V	CZM1CZ30F103
C320		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C321		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C322		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C324		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C325		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C326		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C328		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V	CZM1CZ30F103
C329		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V	CZM1CZ30F103
C330		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/16V	CZM1CZ30F103
C332		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C333		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010

Ref.No.	Mark	Description	Part No.
C335		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C337		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C339		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C340		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C341		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C344		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C345		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C346		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C347		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C348		CHIP CERAMIC CAP. B K 0.047µF/50V or	CHD1JK30B473
		CHIP CERAMIC CAP. B K 0.047µF/25V	CHD1EK30B473
C349		CHIP CERAMIC CAP. B K 0.047µF/50V or	CHD1JK30B473
		CHIP CERAMIC CAP. B K 0.047µF/25V	CHD1EK30B473
C351		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C353		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C391		ELECTROLYTIC CAP. 100µF/10V M or	CE1AMASDL101
		ELECTROLYTIC CAP. 100µF/10V M	CE1AMASTL101
C392		ELECTROLYTIC CAP. 470µF/6.3V M or	CE0KMASDL471
		ELECTROLYTIC CAP. 470µF/6.3V M	CE0KMASTL471
C401		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C404		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C405		ELECTROLYTIC CAP. 33µF/6.3V M H7	CE0KMASSL330
C408		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C409		CHIP CERAMIC CAP.(MELF) Y K 6800pF/ 16V	CZM1CK30Y682
C410		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C411		CHIP CERAMIC CAP.(MELF) Y K 1000pF/ 35V	CZM1GK30Y102
C413		CERAMIC CAP.(AX) Y M 0.012µF/16V	CCA1CMT0Y123
C415		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C416		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C417		CHIP CERAMIC CAP.(MELF) Y K 1000pF/ 35V	CZM1GK30Y102
C418		CERAMIC CAP.(AX) X K 2700pF/16V	CCA1CKT0X272
C419		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C422		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C423		ELECTROLYTIC CAP. 220µF/6.3V M H7	CE0KMASSL221
C424		CERAMIC CAP. B K 470pF/100V or	CCD2AKP0B471
		CERAMIC CAP. B K 470pF/500V	CCD2JKS0B471
C425		FILM CAP.(P) 0.018µF/100V J or	CMA2AJS00183
		FILM CAP.(P) 0.018µF/50V J	CA1J183MS029
C451		ELECTROLYTIC CAP. 0.47µF/50V M or	CE1JMASDLR47
		ELECTROLYTIC CAP. 0.47µF/50V M	CE1JMASTLR47
C452		ELECTROLYTIC CAP. 0.1µF/50V M H7	CE1JMASSL0R1
C453		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C454		ELECTROLYTIC CAP. 2.2µF/50V M H7	CE1JMASSL2R2
C455		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C456		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C457		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C458		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C459		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C460		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C461		CHIP CERAMIC CAP.(MELF) Y K 4700pF/ 16V	CZM1CK30Y472
C462		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C463		CHIP CERAMIC CAP. CH J 330pF/50V	CHD1JJ3CH331
C464		ELECTROLYTIC CAP. 220µF/6.3V M H7	CE0KMASSL221
C465		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010

Ref.No.	Mark	Description	Part No.
C466		CHIP CERAMIC CAP. B K 0.022µF/50V or	CHD1JK30B223
		CHIP CERAMIC CAP. B K 0.022µF/25V	CHD1EK30B223
C467		CHIP CERAMIC CAP.(MELF) Y K 4700pF/ 16V	CZM1CK30Y472
C468		ELECTROLYTIC CAP. 22µF/6.3V M H7	CE0KMASSL220
C469		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C470		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C471		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C472		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C473		ELECTROLYTIC CAP. 47µF/10V M H7	CE1AMASSL470
C474		ELECTROLYTIC CAP. 0.1µF/50V M H7	CE1JMASSL0R1
C475		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C476		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C477		ELECTROLYTIC CAP. 4.7µF/50V M H7	CE1JMASSL4R7
C478		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C479		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C480		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C481		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C482		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C483		ELECTROLYTIC CAP. 22µF/16V M H7	CE1CMASSL220
C484		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C485		ELECTROLYTIC CAP. 22µF/16V M H7	CE1CMASSL220
C486		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C487		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C488		ELECTROLYTIC CAP. 4.7µF/25V M H7	CE1EMASSL4R7
C489		ELECTROLYTIC CAP. 4.7µF/50V M H7	CE1JMASSL4R7
C491		ELECTROLYTIC CAP. 4.7µF/50V M H7	CE1JMASSL4R7
C494		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C495		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C496		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C497		ELECTROLYTIC CAP. 47µF/16V M H7	CE1CMASSL470
C498		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C502		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C503		CHIP CERAMIC CAP. B K 0.022µF/50V or	CHD1JK30B223
		CHIP CERAMIC CAP. B K 0.022µF/25V	CHD1EK30B223
C504		ELECTROLYTIC CAP. 330µF/6.3V M H7	CE0KMASSL331
C507		CHIP CERAMIC CAP.(MELF) SL J 22pF/ 50V	CZM1JJ3SL220
C508		CHIP CERAMIC CAP.(MELF) SL J 18pF/ 50V	CZM1JJ3SL180
C509		CHIP CERAMIC CAP.(MELF) Y K 4700pF/ 16V	CZM1CK30Y472
C510		CHIP CERAMIC CAP. B K 0.047µF/50V or	CHD1JK30B473
		CHIP CERAMIC CAP. B K 0.047µF/25V	CHD1EK30B473
C514		CHIP CERAMIC CAP. B K 0.022µF/50V or	CHD1JK30B223
		CHIP CERAMIC CAP. B K 0.022µF/25V	CHD1EK30B223
C516	A,B	PCB JUMPER D0.6-P5.0	JW5.0T
C519		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C520		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C522		ELECTROLYTIC CAP. 220µF/6.3V M H7	CE0KMASSL221
C529		ELECTROLYTIC CAP. 22µF/10V M H7	CE1AMASSL220
C531	C	ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C532		CHIP CERAMIC CAP.(MELF) SL J 100pF/ 50V	CZM1JJ3SL101
C534		CHIP CERAMIC CAP.(MELF) SL J 27pF/ 50V	CZM1JJ3SL270
C581		ELECTROLYTIC CAP. 47µF/16V M H7	CE1CMASSL470
C583		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104

Ref.No.	Mark	Description	Part No.
C585		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C586		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
C587		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C588		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C589		ELECTROLYTIC CAP. 10µF/16V M H7	CE1CMASSL100
C590		CHIP CERAMIC CAP. F Z 0.1µF/50V or	CHD1JZ30F104
		CHIP CERAMIC CAP. F Z 0.1µF/25V	CHD1EZ30F104
C591	A,B	CHIP CERAMIC CAP.(MELF) B K 220pF/ 50V	CZM1JK30B221
C591	C	CHIP CERAMIC CAP.(MELF) Y K 1000pF/ 35V or	CZM1GKB0Y102
	C	CHIP CERAMIC CAP.(MELF) Y K 1000pF/ 35V or	CZM1GK30Y102
	C	CHIP CERAMIC CAP. B K 1000pF/50V or	CHD1JKB0B102
	C	CHIP CERAMIC CAP. B K 1000pF/50V	CHD1JK30B102
C592		ELECTROLYTIC CAP. 22µF/16V M H7	CE1CMASSL220
C594	C	FILM CAP.(P) 0.018µF/100V J or	CMA2AJS00183
C594	C	FILM CAP.(P) 0.018µF/50V J	CA1J183MS029
C702		ELECTROLYTIC CAP. 100µF/6.3V M or	CE0KMASDL101
		ELECTROLYTIC CAP. 100µF/6.3V M	CE0KMASTL101
C703		CHIP CERAMIC CAP. B K 0.022µF/50V or	CHD1JK30B223
		CHIP CERAMIC CAP. B K 0.022µF/25V	CHD1EK30B223
C705		CHIP CERAMIC CAP.(MELF) F Z 0.01µF/ 16V	CZM1CZ30F103
C709		ELECTROLYTIC CAP. 0.22µF/50V M or	CE1JMASDLR22
		ELECTROLYTIC CAP. 0.22µF/50V M	CE1JMASTLR22
C710		ELECTROLYTIC CAP. 1µF/50V M or	CE1JMASDL010
		ELECTROLYTIC CAP. 1µF/50V M or	CE1JMASTL1R0
		ELECTROLYTIC CAP. 1µF/50V M or	CE1JMASDL1R0
		ELECTROLYTIC CAP. 1µF/50V M	CE1JMASTL010
C712	A,B	ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C853		CHIP CERAMIC CAP.(MELF) B K 180pF/ 50V	CZM1JK30B181
C855		ELECTROLYTIC CAP. 0.22µF/50V M H7	CE1JMASSLR22
C858		CHIP CERAMIC CAP.(MELF) SL J 18pF/ 50V	CZM1JJ3SL180
C859		CHIP CERAMIC CAP.(MELF) SL J 22pF/ 50V	CZM1JJ3SL220
C860		CHIP CERAMIC CAP.(MELF) SL D 10pF/ 50V	CZM1JD3SL100
C706A		CHIP CERAMIC CAP. B K 0.01µF/50V	CHD1JK30B103
CONNECTORS			
CN251		FE CONNECTOR, TOP 9P 09FE-BT-VK-N	JCFEJ09JG001
CN501		CABLE CONNECTOR, 2P TMC-E02X-A1	JCTMC02TG001
CN502		FE CONNECTOR, TOP 5P 05FE-BT-VK-N	JCFEJ05JG001
CN503		CONNECTOR, 8P TMC-J08P-A2	J3TMA08TG004
CN504		FE CONNECTOR, TOP 9P 09FE-BT-VK-N	JCFEJ09JG001
DIODES			
D001		RECTIFIER DIODE 1N4005	NDQZ001N4005
D002		RECTIFIER DIODE 1N4005	NDQZ001N4005
D003		RECTIFIER DIODE 1N4005	NDQZ001N4005
D004		RECTIFIER DIODE 1N4005	NDQZ001N4005
D006		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D008		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D013		RECTIFIER DIODE BA157 or	NDQZ000BA157
		FAST RECOVERY DIODE ERA18-04	QDPZ0ERA1804
D015		RECTIFIER DIODE FR202 or	NDQZ000FR202
		FAST RECOVERY DIODE ERB32-01	QDPZ0ERB3201
D016		SCHOTTKY BARRIER DIODE SB140 or	NDQZ000SB140

Ref.No.	Mark	Description	Part No.
		SCHOTTKY BARRIER DIODE ERB81-004	AERB81004***
D018		ZENER DIODE MTZJT-779.1C or	QDTC0MTZJ9R1
		ZENER DIODE DZ-9.1BSCT265	NDTC0DZ9R1BS
D031		ZENER DIODE MTZJT-775.6B or	QDTB0MTZJ5R6
		ZENER DIODE DZ-5.6BSBT265	NDTB0DZ5R6BS
D051		RECTIFIER DIODE BA158 or	NDQZ000BA158
		RECTIFIER DIODE ERA22-10	QDPZ0ERA2210
D052		ZENER DIODE MTZJT-7710B or	QDTB00MTZJ10
		ZENER DIODE DZ-10BSBT265	NDTB00DZ10BS
D054		RECTIFIER DIODE RL151	NDQZ000RL151
D055		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D057		ZENER DIODE MTZJT-775.1C or	QDTC0MTZJ5R1
		ZENER DIODE DZ-5.1BSCT265	NDTC0DZ5R1BS
D301		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D302		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D303		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D311		PCB JUMPER D0.6-P5.0	JW5.0T
D501		SWITCHING DIODE 1SS133(T-77) or	QDTZ001SS133
		SWITCHING DIODE 1N4148M	NDTZ01N4148M
D555		LED SIR-563ST3F P or	QPQPS1R563ST
		LED SIR-563ST3F Q	QPQQS1R563ST
D701		ZENER DIODE MTZJT-7733D or	QDTD00MTZJ33
		ZENER DIODE DZ-33BSDT265	NDTD00DZ33BS
		TYPE A	
D595		LED(RED) 204HD/E	NPQZ00204HDE
D596		LED(RED) 204HD/E	NPQZ00204HDE
D597		LED(RED) 204HD/E	NPQZ00204HDE
D598		LED(GREEN) 204-10GD/S957	NPQZ10GDS957
D599		LED(GREEN) 204-10GD/S957	NPQZ10GDS957
		TYPE B	
D595		LED(RED) LTL-4211N	NPQZLTL4211N
D596		LED(RED) LTL-4211N	NPQZLTL4211N
D597		LED(RED) LTL-4211N	NPQZLTL4211N
D598		LED(GREEN) LTL-4231N	NPQZLTL4231N
D599		LED(GREEN) LTL-4231N	NPQZLTL4231N
		TYPE C	
D595		LED(RED) LT6311G-41	NPQZ0LT6311G
D596		LED(RED) LT6311G-41	NPQZ0LT6311G
D597		LED(RED) LT6311G-41	NPQZ0LT6311G
D598		LED(GREEN) LT6321-41	NPQZ00LT6321
D599		LED(GREEN) LT6321-41	NPQZ00LT6321
ICS			
IC001 ⚠		PHOTOCOUPLER LTV-817B-F or	NPEB0LTV817F
		PHOTOCOUPLER LTV-817C-F or	NPEC0LTV817F
		PHOTOCOUPLER PC-17T1	QPE100PC17T1
IC301	A,B	IC:Y/C/A LA71090M	QSZBA0RSY011
IC301	C	IC:Y/C/A LA71091M	QSZBA0RSY012
IC451		IC:HIFI LA72653M	QSZBA0RSY013
IC501		MICROCONTROLLER 16BIT M37765MAA1F6GP	QSZAA0RMB018
IC506		IC BD6655FP	QSZAA0SRM001
COILS			
L001 ⚠		LINE FILTER 4.5MH SA-00411B or	LLBG00ZSA001
		LINE FILTER 4MH TLF9UA402W0R3	LLBG00ZTU027
L009		CHOKE COIL 47µF-K	LLBD00PKV007
L251		PCB JUMPER D0.6-P5.0	JW5.0T
L301		INDUCTOR 100µF-K-26T	LLAXKATTU101

Ref.No.	Mark	Description	Part No.
L302		PCB JUMPER D0.6-P5.0	JW5.0T
L303		INDUCTOR 220µF-K-26T	LLAXKATTU221
L304		CHOKE COIL 47µF-K	LLBD00PKV007
L421		INDUCTOR 47µF-K-5FT	LLARKBSTU470
L422		PCB JUMPER D0.6-P5.0	JW5.0T
L451		PCB JUMPER D0.6-P5.0	JW5.0T
L501		PCB JUMPER D0.6-P5.0	JW5.0T
L502		INDUCTOR 100µF-K-26T	LLAXKATTU101
L581		CHOKE COIL 47µF-K	LLBD00PKV007
L701		INDUCTOR 4.7µF-K-26T	LLAXKATTU4R7
L702		PCB JUMPER D0.6-P5.0	JW5.0T
L851		INDUCTOR 1.8µF-K-26T	LLAXKATTU1R8
L852		INDUCTOR 12µF-K-26T	LLAXKATTU120
		TRANSISTORS	
Q001		FET 2SK3472 or	QFWZ02SK3472
		FET 2SK2599	QFQZ02SK2599
Q002		TRANSISTOR 2SC2785(K) or	QQSK02SC2785
		TRANSISTOR KTC3199(BL)	NQS50KTC3199
Q031		TRANSISTOR 2SC2785(J) or	QQSJ02SC2785
		TRANSISTOR 2SC2785(H) or	QQSH02SC2785
		TRANSISTOR 2SC2785(F) or	QQSF02SC2785
		TRANSISTOR 2SC1815-Y(TPE2) or	QQSY02SC1815
		TRANSISTOR 2SC1815-GR(TPE2) or	QQS102SC1815
		TRANSISTOR KTC3199(Y) or	NQSY0KTC3199
		TRANSISTOR KTC3199(GR)	NQS10KTC3199
Q052		RES. BUILT-IN TRANSISTOR BA1F4M-T or	QQSZ00BA1F4M
		RES. BUILT-IN TRANSISTOR KRC103M or	NQSZ0KRC103M
		RES. BUILT-IN TRANSISTOR DTC124ESA	QQSZDTC124ES
Q055		TRANSISTOR 2SC536NF-NPA-AT or	QQSFC536NNPA
		TRANSISTOR 2SC536NG-NPA-AT or	QQSGC536NNPA
		TRANSISTOR 2SC3331(T) or	QSC3331TNPAA
		TRANSISTOR 2SC3331(U)	QSC3331UNPAA
Q056		TRANSISTOR 2SC2120-Y(TPE2) or	QQSY02SC2120
		TRANSISTOR KTC3203(Y)	NQSY0KTC3203
Q060		RES. BUILT-IN TRANSISTOR BN1F4M-T or	QQSZ00BN1F4M
		RES. BUILT-IN TRANSISTOR KRA103M or	NQSZ0KRA103M
		RES. BUILT-IN TRANSISTOR DTA124ESA	QQSZDTA124ES
Q301		TRANSISTOR 2SA1015-GR(TPE2) or	QQS102SA1015
		TRANSISTOR KTA1266(GR)	NQS40KTA1266
Q302		TRANSISTOR KTC3193(Y) or	NQSY0KTC3193
		TRANSISTOR 2SC2058(Q)	QQSQ02SC2058
Q303		TRANSISTOR KTC3193(Y) or	NQSY0KTC3193
		TRANSISTOR 2SC2058(Q)	QQSQ02SC2058
Q391		TRANSISTOR 2SA1015-GR(TPE2) or	QQS102SA1015
		TRANSISTOR KTA1266(GR)	NQS40KTA1266
Q421		TRANSISTOR 2SA1015-GR(TPE2) or	QQS102SA1015
		TRANSISTOR KTA1266(GR)	NQS40KTA1266
Q422		TRANSISTOR 2SC2120-Y(TPE2) or	QQSY02SC2120
		TRANSISTOR KTC3203(Y)	NQSY0KTC3203
Q423		TRANSISTOR 2SC536NF-NPA-AT or	QQSFC536NNPA
		TRANSISTOR 2SC536NG-NPA-AT or	QQSGC536NNPA
		TRANSISTOR 2SC3331(T) or	QSC3331TNPAA
		TRANSISTOR 2SC3331(U)	QSC3331UNPAA
Q424		TRANSISTOR 2SC536NF-NPA-AT or	QQSFC536NNPA
		TRANSISTOR 2SC536NG-NPA-AT or	QQSGC536NNPA
		TRANSISTOR 2SC3331(T) or	QSC3331TNPAA
		TRANSISTOR 2SC3331(U)	QSC3331UNPAA

Ref.No.	Mark	Description	Part No.
Q425		RES. BUILT-IN TRANSISTOR BN1F4M-T or	QQSZ00BN1F4M
		RES. BUILT-IN TRANSISTOR KRA103M or	NQSZ0KRA103M
		RES. BUILT-IN TRANSISTOR DTA124ESA	QQSZDTA124ES
Q501		TRANSISTOR 2SC2785(K) or	QQSK02SC2785
		TRANSISTOR KTC3199(BL)	NQS50KTC3199
Q503		PHOTO TRANSISTOR ST-304L-A or	QPZA00ST304L
		PHOTO TRANSISTOR ST-304L-B or	QPZB00ST304L
		PHOTO TRANSISTOR ST-304L-C or	QPZC00ST304L
		PHOTO TRANSISTOR ST-304L-D	QPZD00ST304L
Q504		PHOTO TRANSISTOR ST-304L-A or	QPZA00ST304L
		PHOTO TRANSISTOR ST-304L-B or	QPZB00ST304L
		PHOTO TRANSISTOR ST-304L-C or	QPZC00ST304L
		PHOTO TRANSISTOR ST-304L-D	QPZD00ST304L
Q506		PHOTO TRANSISTOR PT204-6B-12	NPWZT2046B12
Q701	A,B	RES. BUILT-IN TRANSISTOR BA1L3M-T or	QQSZ00BA1L3M
	A,B	RES. BUILT-IN TRANSISTOR KRC101M	NQSZ0KRC101M
		RESISTORS	
J09	C	CARBON RES. 1/6W J 220 Ω or	RCX6JATZ0221
	C	CARBON RES. 1/4W J 220 Ω	RCX4JATZ0221
R001		GLASS GLAZE RES. 1/2W J 3.3M Ω or	RXX2JZLZ0335
		CARBON RES. 1/2W J 3.3M Ω	RCX2335DP001
R002		METAL OXIDE FILM RES. 1W J 2.7 Ω or	RN012R7ZU001
		METAL OXIDE FILM RES. 1W J 2.7 Ω	RN012R7KE009
R004		CARBON RES. 1/6W J 2.7M Ω or	RCX6JATZ0275
		CARBON RES. 1/4W J 2.7M Ω	RCX4JATZ0275
R005		CARBON RES. 1/6W J 2.7M Ω or	RCX6JATZ0275
		CARBON RES. 1/4W J 2.7M Ω	RCX4JATZ0275
R008		CARBON RES. 1/6W J 560 Ω or	RCX6JATZ0561
		CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R011		METAL OXIDE FILM RES. 1W J 68k Ω or	RN01683ZU001
		METAL OXIDE FILM RES. 1W J 68k Ω	RN01683KE009
R012		CHIP RES.(1608) 1/16W J 22k Ω or	RRXGJR5Z0223
		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R014		METAL OXIDE FILM RES. 1W J 1.2 Ω or	RN011R2ZU001
		METAL OXIDE FILM RES. 1W J 1.2 Ω	RN011R2KE009
R016		CARBON RES. 1/6W J 3.9k Ω or	RCX6JATZ0392
		CARBON RES. 1/4W J 3.9k Ω	RCX4JATZ0392
R019		CHIP RES.(1608) 1/16W J 470k Ω or	RRXGJR5Z0474
		CHIP RES.(1608) 1/10W J 470k Ω	RRXAJR5Z0474
R030		CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
		CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R031		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R032		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R033		CHIP RES.(1608) 1/16W J 390 Ω or	RRXGJR5Z0391
		CHIP RES.(1608) 1/10W J 390 Ω	RRXAJR5Z0391
R037		CHIP RES.(1608) 1/16W J 22k Ω or	RRXGJR5Z0223
		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R038		CHIP RES.(1608) 1/16W J 330 Ω or	RRXGJR5Z0331
		CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R039		CARBON RES. 1/4W J 0.47 Ω	RCX4JATZ0R47
R056		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R057		CARBON RES. 1/4W J 150 Ω	RCX4JATZ0151
R071		CARBON RES. 1/6W J 2.7k Ω or	RCX6JATZ0272
		CARBON RES. 1/4W J 2.7k Ω	RCX4JATZ0272
R072		CHIP RES.(1608) 1/16W J 22k Ω or	RRXGJR5Z0223

Ref.No.	Mark	Description	Part No.
		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R073		CARBON RES. 1/6W J 10k Ω or	RCX6JATZ0103
		CARBON RES. 1/4W J 10k Ω	RCX4JATZ0103
R075		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R253		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R254		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R301		CHIP RES.(1608) 1/16W J 560k Ω or	RRXGJR5Z0564
		CHIP RES.(1608) 1/10W J 560k Ω	RRXAJR5Z0564
R302		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R303		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R304		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R305		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R306		CHIP RES.(1608) 1/16W J 18k Ω or	RRXGJR5Z0183
		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R307		CHIP RES.(1608) 1/16W J 3.9k Ω or	RRXGJR5Z0392
		CHIP RES.(1608) 1/10W J 3.9k Ω	RRXAJR5Z0392
R308		CHIP RES.(1608) 1/16W J 270 Ω or	RRXGJR5Z0271
		CHIP RES.(1608) 1/10W J 270 Ω	RRXAJR5Z0271
R309		CHIP RES.(1608) 1/16W J 15k Ω or	RRXGJR5Z0153
		CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R310		CHIP RES.(1608) 1/16W J 15k Ω or	RRXGJR5Z0153
		CHIP RES.(1608) 1/10W J 15k Ω	RRXAJR5Z0153
R311		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R312		CHIP RES.(1608) 1/16W J 1.2k Ω or	RRXGJR5Z0122
		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R313		CHIP RES.(1608) 1/16W J 100k Ω or	RRXGJR5Z0104
		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R319		CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
		CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R320		CHIP RES.(1608) 1/16W J 1.2k Ω or	RRXGJR5Z0122
		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R321		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R322		CHIP RES.(1608) 1/16W J 5.6M Ω or	RRXGJR5Z0565
		CHIP RES.(1608) 1/10W J 5.6M Ω	RRXAJR5Z0565
R323		CHIP RES.(1608) 1/16W J 100k Ω or	RRXGJR5Z0104
		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R324		CHIP RES.(1608) 1/16W J 82k Ω or	RRXGJR5Z0823
		CHIP RES.(1608) 1/10W J 82k Ω	RRXAJR5Z0823
R326		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R327		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R328		CHIP RES.(1608) 1/16W J 680k Ω or	RRXGJR5Z0684
		CHIP RES.(1608) 1/10W J 680k Ω	RRXAJR5Z0684
R329		CHIP RES.(1608) 1/16W J 1.8k Ω or	RRXGJR5Z0182
		CHIP RES.(1608) 1/10W J 1.8k Ω	RRXAJR5Z0182
R330		CHIP RES.(1608) 1/16W J 1.8k Ω or	RRXGJR5Z0182
		CHIP RES.(1608) 1/10W J 1.8k Ω	RRXAJR5Z0182
R331		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R332		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822

Ref.No.	Mark	Description	Part No.
R335	A,B	CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
	A,B	CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R341		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R342		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R391		CARBON RES. 1/6W J 560 Ω or	RCX6JATZ0561
		CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R392		CARBON RES. 1/6W J 560 Ω or	RCX6JATZ0561
		CARBON RES. 1/4W J 560 Ω	RCX4JATZ0561
R394	A,B	CHIP RES.(1608) 1/16W J 220 Ω or	RRXGJR5Z0221
	A,B	CHIP RES.(1608) 1/10W J 220 Ω	RRXAJR5Z0221
R394	C	CHIP RES.(1608) 1/10W 0 Ω or	RRXAZB5Z0000
	C	CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
	C	CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R395		PCB JUMPER D0.6-P5.0	JW5.0T
R401		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R402		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R407		CHIP RES.(1608) 1/16W J 2.2M Ω or	RRXGJR5Z0225
		CHIP RES.(1608) 1/10W J 2.2M Ω	RRXAJR5Z0225
R408		CHIP RES.(1608) 1/16W J 6.8k Ω or	RRXGJR5Z0682
		CHIP RES.(1608) 1/10W J 6.8k Ω	RRXAJR5Z0682
R409		CHIP RES.(1608) 1/16W J 3.3k Ω or	RRXGJR5Z0332
		CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R410		CHIP RES.(1608) 1/16W J 6.8k Ω or	RRXGJR5Z0682
		CHIP RES.(1608) 1/10W J 6.8k Ω	RRXAJR5Z0682
R411		CHIP RES.(1608) 1/10W J 2.2k Ω or	RRXAJB5Z0222
		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R412		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R413		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R414		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R415		CHIP RES.(1608) 1/16W J 12k Ω or	RRXGJR5Z0123
		CHIP RES.(1608) 1/10W J 12k Ω	RRXAJR5Z0123
R416		CHIP RES.(1608) 1/16W J 330k Ω or	RRXGJR5Z0334
		CHIP RES.(1608) 1/10W J 330k Ω	RRXAJR5Z0334
R417		CHIP RES.(1608) 1/16W J 150 Ω or	RRXGJR5Z0151
		CHIP RES.(1608) 1/10W J 150 Ω	RRXAJR5Z0151
R418		CHIP RES.(1608) 1/16W J 22k Ω or	RRXGJR5Z0223
		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R419		CHIP RES.(1608) 1/16W J 910 Ω or	RRXGJR5Z0911
		CHIP RES.(1608) 1/10W J 910 Ω	RRXAJR5Z0911
R420		CHIP RES.(1608) 1/16W J 330 Ω or	RRXGJR5Z0331
		CHIP RES.(1608) 1/10W J 330 Ω	RRXAJR5Z0331
R421		CARBON RES. 1/6W J 1k Ω or	RCX6JATZ0102
		CARBON RES. 1/4W J 1k Ω	RCX4JATZ0102
R422		CHIP RES.(1608) 1/16W J 22k Ω or	RRXGJR5Z0223
		CHIP RES.(1608) 1/10W J 22k Ω	RRXAJR5Z0223
R424		CARBON RES. 1/6W J 47k Ω or	RCX6JATZ0473
		CARBON RES. 1/4W J 47k Ω	RCX4JATZ0473
R425		CARBON RES. 1/6W J 100 Ω or	RCX6JATZ0101
		CARBON RES. 1/4W J 100 Ω	RCX4JATZ0101
R426		CARBON RES. 1/6W J 820 Ω or	RCX6JATZ0821
		CARBON RES. 1/4W J 820 Ω	RCX4JATZ0821
R428		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103

Ref.No.	Mark	Description	Part No.
R429		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R430		CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R431		CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R451		CHIP RES.(1608) 1/16W J 12k Ω or	RRXGJR5Z0123
		CHIP RES.(1608) 1/10W J 12k Ω	RRXAJR5Z0123
R452		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R453		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R454		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R455		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R456		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R457		CHIP RES.(1608) 1/16W J 470 Ω or	RRXGJR5Z0471
		CHIP RES.(1608) 1/10W J 470 Ω	RRXAJR5Z0471
R458		CHIP RES.(1608) 1/16W J 3.3k Ω or	RRXGJR5Z0332
		CHIP RES.(1608) 1/10W J 3.3k Ω	RRXAJR5Z0332
R459		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R460		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R461		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R462		CHIP RES.(1608) 1/16W J 8.2k Ω or	RRXGJR5Z0822
		CHIP RES.(1608) 1/10W J 8.2k Ω	RRXAJR5Z0822
R463		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R464		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R466		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R469		CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R470		CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R471		CHIP RES.(1608) 1/16W 0 Ω or	RRXGZR5Z0000
		CHIP RES.(1608) 1/10W 0 Ω	RRXAZR5Z0000
R472		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R473		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R474	C	CARBON RES. 1/6W J 12k Ω or	RCX6JATZ0123
	C	CARBON RES. 1/4W J 12k Ω	RCX4JATZ0123
R501		CHIP RES.(1608) 1/16W J 820 Ω or	RRXGJR5Z0821
		CHIP RES.(1608) 1/10W J 820 Ω	RRXAJR5Z0821
R502		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R504		CHIP RES.(1608) 1/16W J 100k Ω or	RRXGJR5Z0104
		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R505		CHIP RES.(1608) 1/16W J 100k Ω or	RRXGJR5Z0104
		CHIP RES.(1608) 1/10W J 100k Ω	RRXAJR5Z0104
R508		CHIP RES.(1608) 1/16W J 330k Ω or	RRXGJR5Z0334
		CHIP RES.(1608) 1/10W J 330k Ω	RRXAJR5Z0334
R509		CHIP RES.(1608) 1/16W J 39k Ω or	RRXGJR5Z0393
		CHIP RES.(1608) 1/10W J 39k Ω	RRXAJR5Z0393
R513		CHIP RES.(1608) 1/16W J 220k Ω or	RRXGJR5Z0224
		CHIP RES.(1608) 1/10W J 220k Ω	RRXAJR5Z0224
R514		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R515		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R516		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R517		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R518		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R521		CARBON RES. 1/4W G 4.7k Ω	RCX4GATZ0472
R522		CARBON RES. 1/4W G 1.5k Ω	RCX4GATZ0152
R523		CARBON RES. 1/4W G 22k Ω	RCX4GATZ0223
R524		CARBON RES. 1/4W G 470 Ω	RCX4GATZ0471
R525		CARBON RES. 1/4W G 10k Ω	RCX4GATZ0103
R526		CARBON RES. 1/4W G 3.6k Ω	RCX4GATZ0362
R528		CHIP RES.(1608) 1/16W J 33k Ω or	RRXGJR5Z0333
		CHIP RES.(1608) 1/10W J 33k Ω	RRXAJR5Z0333
R532		CHIP RES.(1608) 1/10W J 470k Ω or	RRXAJB5Z0474
		CHIP RES.(1608) 1/16W J 470k Ω or	RRXGJR5Z0474
		CHIP RES.(1608) 1/10W J 470k Ω	RRXAJR5Z0474
R533		CHIP RES.(1608) 1/10W J 470k Ω or	RRXAJB5Z0474
		CHIP RES.(1608) 1/16W J 470k Ω or	RRXGJR5Z0474
		CHIP RES.(1608) 1/10W J 470k Ω	RRXAJR5Z0474
R535		CARBON RES. 1/4W J 150 Ω	RCX4JATZ0151
R537		CHIP RES.(1608) 1/16W J 4.7k Ω or	RRXGJR5Z0472
		CHIP RES.(1608) 1/10W J 4.7k Ω	RRXAJR5Z0472
R538		CHIP RES.(1608) 1/16W J 18k Ω or	RRXGJR5Z0183
		CHIP RES.(1608) 1/10W J 18k Ω	RRXAJR5Z0183
R542		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R543		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R545		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R546		CHIP RES.(1608) 1/16W J 47k Ω or	RRXGJR5Z0473
		CHIP RES.(1608) 1/10W J 47k Ω	RRXAJR5Z0473
R547		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R548		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R581		CHIP RES.(1608) 1/16W J 68k Ω or	RRXGJR5Z0683
		CHIP RES.(1608) 1/10W J 68k Ω	RRXAJR5Z0683
R582		CHIP RES.(1608) 1/16W J 10k Ω or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10k Ω	RRXAJR5Z0103
R583		CARBON RES. 1/4W J 0.47 Ω	RCX4JATZ0R47
R585	A,B	CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
	A,B	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R585	C	CHIP RES.(1608) 1/10W J 1.8k Ω or	RRXAJB5Z0182
	C	CHIP RES.(1608) 1/16W J 1.8k Ω or	RRXGJR5Z0182
	C	CHIP RES.(1608) 1/10W J 1.8k Ω	RRXAJR5Z0182
R586		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R587		CHIP RES.(1608) 1/16W J 1.2k Ω or	RRXGJR5Z0122
		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R588		CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
		CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R589	A,B	CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
	A,B	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R589	C	CHIP RES.(1608) 1/10W J 2.2k Ω or	RRXAJB5Z0222

Ref.No.	Mark	Description	Part No.
	C	CHIP RES.(1608) 1/16W J 2.2kΩ or	RRXGJR5Z0222
	C	CHIP RES.(1608) 1/10W J 2.2kΩ	RRXAJR5Z0222
R595		CARBON RES. 1/6W J 680Ω or	RCX6JATZ0681
		CARBON RES. 1/4W J 680Ω	RCX4JATZ0681
R598		CARBON RES. 1/4W J 150Ω	RCX4JATZ0151
R602		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R603		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R606		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R608		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R610		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R612		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R614		CHIP RES.(1608) 1/16W J 10kΩ or	RRXGJR5Z0103
		CHIP RES.(1608) 1/10W J 10kΩ	RRXAJR5Z0103
R643		CARBON RES. 1/4W J 150Ω	RCX4JATZ0151
R647		CARBON RES. 1/6W J 560Ω or	RCX6JATZ0561
		CARBON RES. 1/4W J 560Ω	RCX4JATZ0561
R648		CARBON RES. 1/6W J 560Ω or	RCX6JATZ0561
		CARBON RES. 1/4W J 560Ω	RCX4JATZ0561
R701		CHIP RES.(1608) 1/16W J 100Ω or	RRXGJR5Z0101
		CHIP RES.(1608) 1/10W J 100Ω	RRXAJR5Z0101
R702		CARBON RES. 1/6W J 1.8kΩ or	RCX6JATZ0182
		CARBON RES. 1/4W J 1.8kΩ	RCX4JATZ0182
R704		CHIP RES.(1608) 1/16W J 1kΩ or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1kΩ	RRXAJR5Z0102
R705		CHIP RES.(1608) 1/16W J 1kΩ or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1kΩ	RRXAJR5Z0102
R751		CHIP RES.(1608) 1/16W J 75Ω or	RRXGJR5Z0750
		CHIP RES.(1608) 1/10W J 75Ω	RRXAJR5Z0750
R752		CHIP RES.(1608) 1/16W J 75Ω or	RRXGJR5Z0750
		CHIP RES.(1608) 1/10W J 75Ω	RRXAJR5Z0750
R753		CHIP RES.(1608) 1/16W J 75Ω or	RRXGJR5Z0750
		CHIP RES.(1608) 1/10W J 75Ω	RRXAJR5Z0750
R852		CHIP RES.(1608) 1/16W J 1kΩ or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1kΩ	RRXAJR5Z0102
R853		CHIP RES.(1608) 1/16W J 1.5kΩ or	RRXGJR5Z0152
		CHIP RES.(1608) 1/10W J 1.5kΩ	RRXAJR5Z0152
R854		CHIP RES.(1608) 1/16W J 1MΩ or	RRXGJR5Z0105
		CHIP RES.(1608) 1/10W J 1MΩ	RRXAJR5Z0105
SWITCHES			
SW501		TACT SWITCH KSH0614B or	SST0101HH024
		TACT SWITCH KSM0614B or	SST0101HH013
		TACT SWITCH SKQSAF001A	SST0101AL041
SW502		TACT SWITCH KSH0614B or	SST0101HH024
		TACT SWITCH KSM0614B or	SST0101HH013
		TACT SWITCH SKQSAF001A	SST0101AL041
SW503		TACT SWITCH KSH0614B or	SST0101HH024
		TACT SWITCH KSM0614B or	SST0101HH013
		TACT SWITCH SKQSAF001A	SST0101AL041
SW504		TACT SWITCH KSH0614B or	SST0101HH024
		TACT SWITCH KSM0614B or	SST0101HH013
		TACT SWITCH SKQSAF001A	SST0101AL041
SW505		TACT SWITCH KSH0614B or	SST0101HH024
		TACT SWITCH KSM0614B or	SST0101HH013
		TACT SWITCH SKQSAF001A	SST0101AL041
SW506		PUSH SWITCH SPPB610301	SSP0102AL001

Ref.No.	Mark	Description	Part No.
SW507		ROTARY MODE SWITCH SSS-43MD	SSR0106KB001
SW701		SLIDE SWITCH SK12D07VG5-L A	SSS0102LY003
MISCELLANEOUS			
A5		JACK BOARD(HI-FI) H36D4PX:PHILIP-PINE	0VM303638A
AC001 ⚠		AC CORD WAC0172LTE01 or	WAC0172LTE01
		AC CORD LA-2366	WAC0172LW006
2B3		HOLDER, SENSOR(2) H5700UD	0VM304011
2B8		BUSH, LED(F) H3700UD	0VM409508
2B15		TAPE, HIMELON H7700UD(10*15)	0VM411666
2B34		SHIELD, HEAD H7700UD	0VM304570
F001 ⚠		FUSE 1A/250V or	PAGA20CW3102
		FUSE 1A/250V	PAGG20CAG102
FH001		FUSE HOLDER MSF-015	XH01Z00LY001
FH002		FUSE HOLDER MSF-015	XH01Z00LY001
JK751		RCA JACK MSP-283V-B-324 or	JXRL040LY006
		RCA JACK JPJ4811-01-324	JXRL040HD002
JK752		RCA JACK MSP-293V3-324 or	JYRL060LY003
		RCA JACK JPJ5121-01-324	JYRL060HD009
JK753		RCA JACK(YELLOW) MSP-281V4-B or	JXRL010LY003
		RCA JACK(YELLOW) JPJ2023-01-040	JXRL010HD014
JK754		RCA JACK(WHITE) MSP-281V1-B or	JXRL010LY005
		RCA JACK(WHITE) JPJ2023-01-030	JXRL010HD013
JK755		RCA JACK(RED) MSP-281V3-A or	JYRL010LY002
		RCA JACK(RED) JPJ1023-01-020	JYRL010HD006
JW001	C	WIRE 070/BRO/AWG26#10	WX3101A64F07
JW003	A,B	WIRE 080/BRO/AWG26#1007	WX3101A65508
RS501		REMOTE RECEIVER PIC-37042LU	USESJRSKK033
T001 ⚠		PULSE TRANS SA-00710	LTT00CPSA088
TP301		PCB JUMPER D0.6-P15.0	JW15.0T
TP302		PCB JUMPER D0.6-P10.0	JW10.0T
TP303		PCB JUMPER D0.6-P9.0	JW9.0T
TP502		PCB JUMPER D0.6-P5.0	JW5.0T
TP505		PCB JUMPER D0.6-P10.0	JW10.0T
TP506		PCB JUMPER D0.6-P5.0	JW5.0T
TP510		PCB JUMPER D0.6-P12.5	JW12.5T
TP511		PCB JUMPER D0.6-P25.0	JW25.0T
TP751		PCB JUMPER D0.6-P17.5	JW17.5T
TP753		PCB JUMPER D0.6-P10.0	JW10.0T
TP754		PCB JUMPER D0.6-P10.0	JW10.0T
TU701		TUNER UNIT TMDH2-A29A or	UTUNNTUAL027
		TUNER UNIT VD045AQ or	UTUNNTUSP020
		TUNER UNIT VD045AP or	UTUNNTUSP016
		TUNER UNIT TMDH2-A01B or	UTUNNTUAL023
		TUNER UNIT NJH3091U254	UTUNNTUJR010
VR501		CARBON P.O.T. 100kΩB	VRCB104HH014
X301		X'TAL 3.579545MHz(20PPM) or	FXC355LJNY01
		X'TAL 3.579545MHz or	FXC355LLN001
		X'TAL 3.579545MHz(20PPM) or	FXC355LDS001
		X'TAL 3.579545MHz	1811389
X502		X'TAL 32.768kHz(20PPM) or	FXC323LJNY01
		X'TAL 32.768kHz(20PPM) or	FXC323LCT001
		X'TAL 32.768kHz(20PPM)	FXC323LDS002

FUNCTION CBA

Ref.No.	Mark	Description	Part No.
		FUNCTION CBA (MCV-B) Consists of the following	----------
		CONNETOR	
CN651		ANGLE PIN HEADER, 3P 6029B-1-03Z002-T	5700063
		RESISTORS	
R651	A,B	CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
	A,B	CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R651	C	CHIP RES.(1608) 1/10W J 1.8k Ω or	RRXAJB5Z0182
	C	CHIP RES.(1608) 1/16W J 1.8k Ω or	RRXGJR5Z0182
	C	CHIP RES.(1608) 1/10W J 1.8k Ω	RRXAJR5Z0182
R652		CHIP RES.(1608) 1/16W J 1k Ω or	RRXGJR5Z0102
		CHIP RES.(1608) 1/10W J 1k Ω	RRXAJR5Z0102
R653		CHIP RES.(1608) 1/16W J 1.2k Ω or	RRXGJR5Z0122
		CHIP RES.(1608) 1/10W J 1.2k Ω	RRXAJR5Z0122
R654		CHIP RES.(1608) 1/16W J 1.5k Ω or	RRXGJR5Z0152
		CHIP RES.(1608) 1/10W J 1.5k Ω	RRXAJR5Z0152
R655		CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
		CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R656	A,B	CHIP RES.(1608) 1/16W J 2.2k Ω or	RRXGJR5Z0222
	A,B	CHIP RES.(1608) 1/10W J 2.2k Ω	RRXAJR5Z0222
R656	C	CHIP RES.(1608) 1/10W J 3.9k Ω or	RRXAJB5Z0392
	C	CHIP RES.(1608) 1/16W J 3.9k Ω or	RRXGJR5Z0392
	C	CHIP RES.(1608) 1/10W J 3.9k Ω	RRXAJR5Z0392
		SWITCHES	
SW651	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW652	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW653	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW654	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW655	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW656	A	TACT SWITCH KSH0614B or	SST0101HH024
	A	TACT SWITCH KSM0614B or	SST0101HH013
	A	TACT SWITCH SKQSAF001A	SST0101AL041
SW657	A,B,C	TACT SWITCH KSH0614B or	SST0101HH024
	A,B,C	TACT SWITCH KSM0614B or	SST0101HH013
	A,B,C	TACT SWITCH SKQSAF001A	SST0101AL041
SW662	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024
SW663	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024
SW664	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024
SW671	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024
SW675	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024
SW676	B,C	TACT SWITCH SKQSAF001A or	SST0101AL041
	B,C	TACT SWITCH KSM0614B or	SST0101HH013
	B,C	TACT SWITCH KSH0614B	SST0101HH024

MCV CBA (Type B)

Ref.No.	Mark	Description	Part No.
	A B,C	MCV CBA (MAIN+FUNCTION) MCV CBA (MAIN+FUNCTION) Consists of the following	0VSA11278 0VSA11294
		MAIN CBA (MCV-A) FUNCTION CBA (MCV-B)	---------- ----------

MAIN CBA

Ref.No.	Mark	Description	Part No.
		MAIN CBA (MCV-A) Consists of the following	----------
C474		CERAMIC CAP.(AX) F Z 0.033µF/16V	CCA1CZTFZ333
C479		ELECTROLYTIC CAP. 0.47µF/50V M H7	CE1JMASSLR47
C480		ELECTROLYTIC CAP. 0.1µF/50V M H7	CE1JMASSL0R1
C483		ELECTROLYTIC CAP. 47µF/10V M H7	CE1AMASSL470
C485		ELECTROLYTIC CAP. 47µF/6.3V M H7	CE0KMASSL470
C486		ELECTROLYTIC CAP. 1µF/50V M H7	CE1JMASSL010
C488		ELECTROLYTIC CAP. 0.47µF/50V M H7	CE1JMASSLR47
IC451		IC:HIFI LA72652M	QSMBA0RSY001
JW001		WIRE 070/BRO/AWG26#1007 (Type B only)	WX3101A64F07
JW002		WIRE 050/BRO/AWG26#1007 (Type B only)	WX3101A64F05
L251		PCB JUMPER D0.6-P5.0 (Type A only)	JW5.0T

DECK PARTS LIST

NOTE:
Two different, but interchangeable, types of Capstan Motor (B37) may be installed in these models. Please confirm B37 Capstan Motor type by a part number on the rotor.
B37 Capstan Motor type varies in combination with L1051. Please see Table 1 for details and combination.

Table 1 (B37 and L1051 Combination)

B37 Capstan Motor		L1051
Type	Part No.	Part No.
A	N9640CML	GPMS9060
B	N9650CML	GPMB9060

Ref. No.	Description	Part No.
B2	CYLINDER ASSEMBLY MK10 NTSC 4HD HIFI or	N1268CYL
	CYLINDER ASSEMBLY(V) MK10 NTSC 4HD HIFI	N1269CYL
B3	LOADING MOTOR ASSEMBLY MK10	0VSA11013
B8	PULLEY ASSEMBLY MK10	0VSA11021
B9	MOVING GUIDE S PREPARATION MK10	0VSA11002
B10	MOVING GUIDE T PREPARATION MK10	0VSA11004
B11	LOADING ARM T ASSEMBLY MK10	0VSA11001
B12	LOADING ARM S ASSEMBLY MK10	0VSA11019
B27	TENSION LEVER SUB ASSEMBLY MK10	0VSA11016
B31	AC HEAD ASSEMBLY MK10	0VSA11014
B35	TAPE GUIDE ASSEMBLY MK10	0VSA11007
B37	CAPSTAN MOTOR 288/CCM001	N9640CML
B37	CAPSTAN MOTOR 288/CCM002	N9650CML
B52	CAP BELT MK10	0VM411138
B73	FE HEAD(MK10) HVFHP0044A or	DHVEC01AL006
	FE HEAD ASSEMBLY MK10 or	N9741FEL
	FE HEAD(MK10) MH-131SF10	DHVEC01Z0004
B74	PRISM MK10	0VM202870
B86	F BRAKE ASSEMBLY MK10	0VSA11020
B121	WORM MK10	0VM411094
B122	WORM SHAFT MK10 or	0VM411650
	WORM SHAFT(C) MK10	0VM411651
B126	PULLEY MK10	0VM411093
B133	IDLER ASSEMBLY MK10	0VSA11017
B148	TG CAP MK6	0VM407664C
B300	C DRIVE LEVER R MK10	0VM304409
B303	F DOOR OPENER A MK10	0VM304553
B313	C.DRIVE SPRING MK10	0VM411111
B319	CASSETTE SPRING MK9	0VM410571
B347	GUIDE HOLDER MK10	0VM304407
B354	SLIDER R MK10	0VM100913
B355	SLIDER L MK10	0VM202867
B359	CLEANER LEVER MK10 (See Mechanical Parts List)	
B360	CLEANER ROLLER MK9 (See Mechanical Parts List)	
B361	CL POST MK10 (See Mechanical Parts List)	
B401	VH CONNECTOR 9AJ MK10 JST	0VM304543
B402	VH CONNECTOR 9BJ MK10 JST	0VM411466
B403	ACH CONNECTOR AN(9P) MK9	0VM303991
B404	ACH CONNECTOR 9B MK10	0VM411471
B410	PINCH ARM(A) ASSEMBLY MK10	0VSA10995
B411	PINCH SPRING MK10	0VM411092
B414	M BRAKE S ASSEMBLY MK10	0VSA10999
B416	M BRAKE T ASSEMBLY MK10	0VSA11000
B417	TENTION SPG MK10	0VM411125C
B425	LOCK LEVER SPRING MK10	0VM411110
B426	KICK PULLEY MK10	0VM411095
B472	SLIDER R ASSEMBLY MK10	0VSA11288
B482	CASSETTE PLATE MK10	0VM202869
B483	LOCK LEVER MK10	0VM411109
B487	BAND BRAKE MK10	0VM304416
B488	MODE LEVER MK10	0VM100918H
B491	CAM GEAR(A) MK10	0VM100914
B492	MODE GEAR MK10	0VM304402F
B494	DOOR OPENER B MK10	0VM304398
B499	T LEVER HOLDER MK10	0VM304419
B501	WORM HOLDER MK10	0VM304397
B502	CAM GEAR(B) MK10	0VM304403
B505	P.S.W F 6*2.55*0.5	0VM402629A
B507	REEL WASHER MK9 5*2.1*0.5	0VM410058
B508	S BRAKE SPRING MK10	0VM411121
B510	P.S.W F 6*2.55*0.5	0VM402629A
B512	REEL WASHER MK9 5*2.1*0.5	0VM410058
B513	PSCW(752605) MK10	0VM411516
B514	SCREW RACK MK10	0VM411535
B516	REEL WASHER MK9 5*2.1*0.5	0VM410058
B518	P.S.W CUT 1.6X4.0X0.5T	0VM408485A
B520	T BRAKE SPRING MK10	0VM411123
B521	SOFT SPRING MK10	0VM411122
B522	TG POST ASSEMBLY MK10	0VSA11012
B523	FIRST POST ASSEMBLY MK9	0VSA10062
B524	MOTOR PCB ASSEMBLY(M) MK10	0VSA11194
B525	LDG BELT MK10	0VM411097
B529	CLEANER ASSEMBLY MK10 (See Mechanical Parts List)	
B550	TAPE GUIDE ARM SPRING MK6	0VM407704E
B551	FF ARM MK10	0VM304424
B552	ADJUST SPRING MK10	0VM411697
B555	RACK ASSEMBLY MK10	0VSA11009
B556	STANDARD POST MK9	0VM410055C
B557	MOTOR PULLEY U5	0VM403205A
B558	LOADING MOTOR M31E-1 R14 7215	MMDZB12MM001
B559	CLUTCH ASSEMBLY MK10	0VSA11018
B560	KICK SPRING MK10	0VM411475
B561	F DOOR SPRING MK10	0VM411430
B562	C DRIVE LEVER L MK10	0VM304408
B563	SLIDER SHAFT MK10	0VM411112
B564	M GEAR MK10	0VM411136
B565	SENSOR GEAR MK10	0VM411134
B566	FF ARM HOLDER MK10	0VM304448
B567	PINCH ARM(B) MK10	0VM304396
B568	BT ARM MK10	0VM304417G
B569	CAM HOLDER MK10	0VM304404
B570	CAM RACK SPG MK10	0VM411102
B571	P.S.W F 6*2.55*0.5	0VM402629A
B572	P.S.W CUT 1.6X4.0X0.5T	0VM408485A
B573	REEL S MK10	0VM202871

Ref. No.	Description	Part No.
B574	REEL T MK10	0VM202872
B575	RADIATOR PLATE MK10	0VM411330
B576	SLIDE HOLDER(S) MK10	0VM411728
B577	SLIDE HOLDER(T) MK10	0VM411729
L1051	SCREW, S-TIGHT M2.6X6 PAN HEAD +	GPMS9060
L1051	SCREW, B-TIGHT M2.6X6 PAN HEAD+	GPMB9060
L1053	SCREW, S-TIGHT M2.6X8 WASHER HEAD+	GCMS9080
L1151	SCREW, SEMS M2.6X4 PAN +	CPM39040
L1191	SCREW, S-TIGHT M2.6X8 WASHER HEAD+	GCMS9080
L1321	SCREW, S-TIGHT M3X6 BIND HEAD+	GBMS3060
L1341	SCREW, P-TIGHT M2.6X6 BIND HEAD+	GBMP9060
L1406	AC HEAD SCREW MK9	0VM410964
L1450	SCREW, SEMS M2.6X5 PAN HEAD+	CPM39050
L1460	SCREW M2.6X6 PAN HEAD +	SPM39060
L1461	SCREW, P-TIGHT M2.6X6 WASHER HEAD+	GCMP9060
L1463	SCREW, S-TIGHT M2.6X4 BIND HEAD+	GBMS9040
L1466	SCREW, S-TIGHT M2.6X6 BIND HEAD+	GBMS9060
L1469	SCREW, S-TIGHT M2.6X6 PAN HEAD +	GPMS9060
L1471	SCREW, S-TIGHT M2.6X6 BIND HEAD+	GBMS9060
L1480	SCREW, S-TIGHT M2.6X6 PAN HEAD +	GPMS9060
L1482	SCREW, B-TIGHT M2.3X4 BIND HEAD+	GBMBY040
L1483	SCREW, P-TIGHT M2.6X8 BIND HEAD+	GBMP9080

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